Oracle® Communications

Cloud Native Core Licensing Information User Manual

Release 2.23.1
F77601-01
February 2023

Oracle Communications Cloud Native Core Licensing Information User Manual, Release 2.23.1

F77601-01

Copyright © 2019, 2023, Oracle and/or its affiliates.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract. The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, and MySQL are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.

Contents

1 Introduction

2 Licensing Information

3 Third-Party Notices and/or Licenses

3.1 Commercial Software 3-1

3.2 Open Source or Other Separately Licensed Software 3-1

3.2.1 Oracle Communications Cloud Native Core, Cloud Native Environment 23.1.0 Components 3-1

3.2.2 Automated Test Suite 23.1.0 Components 3-2

3.2.3 Oracle Communications Cloud Native Core, Binding Support Function 23.1.0 Components 3-3

3.2.4 Oracle Communications Cloud Native Configuration Console 23.1.0 Components 3-7

3.2.5 Oracle Communications Cloud Native Core, Network Exposure Function 23.1.0 Components 3-9

3.2.6 Oracle Communications Cloud Native Core, Network Repository Function 23.1.0 Components 3-11

3.2.7 Oracle Communications Cloud Native Core, Network Slice Selection Function 23.1.0 Components 3-13

3.2.8 Oracle Communications Cloud Native Core, Cloud Native Core Policy 23.1.0 Components 3-14

3.2.9 Oracle Communications Cloud Native Core, Security Edge Protection Proxy 23.1.0 Components 3-19

3.2.10 Oracle Communications Cloud Native Core, Service Communication Proxy 23.1.0 Components 3-21

3.2.11 Oracle Communications Cloud Native Core, Unified Data Repository 23.1.0 Components 3-22

3.2.12 Oracle Communications Cloud Native Core, Licensing Information 3-25

A GNU General Public License, Version 2 (GPL-2.0)

B GNU General Public License, Version 2 (GPL-2.1)

C GNU Lesser General Public License, version 3 (LGPL-3)

D Apache License, Version 1.1 (Apache 1.1)

E Apache License, version 2.0 (Apache 2.0)

F The FreeBSD Project

G The MIT License (MIT)

H Zlib License

I ACE- 6.4.7 License

J ECLIPSE 1.0 License

K PHP License

L COMMON DEVELOPMENT AND DISTRIBUTION LICENSE Version 1.0

M BSD License and JSON License

N JDOM 2.0.5 License

O Artistic License

P Artistic License 2.0

Q The bzip2 License

R The Common Public License version 1.0

S Mozilla Public License (MPL), Version 2.0

T GNU Lesser General Public License, Version 2.1 (LGPL-2.1)

U Creative Commons Attribution License, Attribution 2.5

V Node.js License

W GNU General Public License v3 (GPL v3)

X Zope Public License (ZPL) Version 2.0

Y ECLIPSE 2.0 License

Z COMMON DEVELOPMENT AND DISTRIBUTION LICENSE Version 1.1

AA Apple Public Source License Version 2.0 - August 6, 2003

1 Introduction

This Licensing Information document is a part of the product or program documentation under the terms of your Oracle license agreement and is intended to help you understand the program editions, entitlements, restrictions, prerequisites, special license rights, and/or separately licensed third party technology terms associated with the Oracle software program(s) covered by this document (the "Program(s)"). Entitled or restricted use products or components identified in this document that are not provided with the particular Program may be obtained from the Oracle Software Delivery Cloud website (https://edelivery.oracle.com) or from media Oracle may provide. If you have a question about your license rights and obligations, please contact your Oracle sales representative, review the information provided in Oracle's Software Investment Guide (http://www.oracle.com/us/corporate/pricing/software-investment-guide/index.html), and/or contact the applicable Oracle License Management Services representative listed on http://www.oracle.com/us/corporate/license-management-services/index.html .

2

Licensing Information

Refer to the table below for information on:

- Description of Product Editions and Permitted Features
- Prerequisite Products
- Entitled Products and Restricted Use Licenses

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Cloud Native Environment - 25K Active Subscribers	**Description:** This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Cloud Native Environment provides tools and capabilities to run cloud native network functions in the network. This CNE SKU is an optional SKU only when the customer is purchasing the CNE from Oracle. Given license provide access to following capabilities: Cloud Native Environment (CNE), CNCF Tools **Prerequisites:** Any one of the following licenses is prerequisite to license and use Oracle Communications Cloud Native Core, Cloud Native Environment - 25K Active Subscribers: • Oracle Communications Cloud Native Core, Authentication Server Function - per 25K Active Subscribers • Oracle Communications Cloud Native Core, Binding Support Function - per 25K Active Subscribers • Oracle Communications Cloud Native Core, Converged Policy - per 25K Active Subscribers • Oracle Communications Cloud Native Core, Converged Signaling - 25K Active Subscribers • Oracle Communications Cloud Native Core, Diameter Routing Agent - 25K Active Subscribers • Oracle Communications Cloud Native Core, Network Exposure Function - 25K Active Subscribers • Oracle Communications Cloud Native Core , Network Repository Function - 25K Active Subscribers • Oracle Communications Cloud Native Core, Network Slice Selection Function - 25K Active Subscribers • Oracle Communications Cloud Native Core, Policy Control Function - 25K Active Subscribers • Oracle Communications Cloud Native Core, Policy and Charging Rules Function - 25K Active Subscribers • Oracle Communications Cloud Native Core, Routing and Selection Domain - 25K Active Subscribers • Oracle Communications Cloud Native Core, Security Edge Protection Proxy - 25K Active Subscribers

Product	Sub product	Licensing Information
		• Oracle Communications Cloud Native Core , Service Communication Proxy - 25K Active Subscribers • Oracle Communications Cloud Native Core, Unified Data Repository - 25K Active Subscribers • Oracle Communications Cloud Native Core, Unified Data Management - 25K Active Subscribers • Oracle Communications Cloud Native Core, Unstructured Data Storage Function - 25K Active Subscribers
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Authentication Server Function - per 25K Active Subscribers	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Authentication Server Function (AUSF) is responsible of the primary authentication and key agreement procedures carried out to enable mutual authentication between UE and network. It provides keying material that can be used between the UE and network in subsequently security procedures. This license is based on per 25k active subscribers perpetual. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: The following license is prerequisite to license and use Oracle Communications Cloud Native Core, Authentication Server Function - per 25K Active Subscribers: Oracle Communications Cloud Native Core, Unified Data Management - per 25K Active Subscribers **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Authentication Server Function - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: Since Unified Data Management is a prerequisites for AUSF. Unified Data Management counts unique device identifiers that it has activated.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, InterWorking and Mediation Function - per 25K Active Subscribers	**Description:** This subproduct adds the following optional features to the Oracle Communications Cloud Native Core for Service Communication Proxy (SCP) and Security Edge Protection Proxy (SEPP): • Message manipulation between HTTP <=> HTTP. **Prerequisites:** The following licenses are prerequisites to Oracle Communications Cloud Native Core, InterWorking and Mediation Function - per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Service Communication Proxy - 25K Active Subscribers Perpetual, or • Oracle Communications Cloud Native Core, Security Edge Protection Proxy - 25K Active Subscribers Perpetual
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Interworking and Mediation Function for NB-IoT - 25K Active Subscribers Perpetual	**Description:** This subproduct adds the following optional features to the Oracle Communications Cloud Native Core for Service Communication Proxy (SCP) NB-IoT and Security Edge Protection Proxy (SEPP) NB-IoT: • Message manipulation between HTTP <=> HTTP. **Prerequisites:** The following licenses are prerequisites to Oracle Communications Cloud Native Core, InterWorking and Mediation Function for NB-IoT- per 25K Active Subscribers: Perpetual • Oracle Communications Cloud Native Core, Service Communication Proxy NB-IoT - 25K Active Subscribers Perpetual, or • Oracle Communications Cloud Native Core, Security Edge Protection Proxy NB-IoT - 25K Active Subscribers Perpetual

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Binding Support Function - per 25K Active Subscribers	**Description:** This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Binding Support Function (BSF) provides session binding functionality, which ensures request for session reaches the relevant PCF holding the session information. This service: • Allows Network Function (NF) consumers to register, update and remove the binding information; and • Allows Network Function (NF) consumers to retrieve the binding information. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Binding Support Function - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: BSF counts unique device identifiers as it processes messages.
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Binding Support Function Feature Pack B - per 25K Active Subscribers	**Description**: This sub-product adds optional features to Binding Support Function. **Prerequisites**: The following licenses is prerequisite to license and use Oracle Communications Cloud Native Core, Binding Support Function Feature Pack B - per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Binding Support Function - per 25K Active Subscribers

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Converged Policy - per 25K Active Subscribers	**Description**: This functionality provides the Right to Use the Cloud Native Policy and Charging Rules Function (cnPCRF) and Cloud Native Policy Control Function (PCF) NFs. The Policy Control Function (PCF) allows the customer to support centralized policy management in their 5G core network. The Cloud Native Policy and Charging Rules Function (cnPCRF) allows the customer to support centralized policy management in their 4G core network. Overall this converged license enables customers to perform Policy management for 4G and 5G Networks as a complete solution and also enables customers to transition subscribers from 4G to 5G over time. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Converged Policy - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: cnPCRF and PCF counts unique device identifiers as it processes messages.
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Converged Policy Feature Pack B - per 25K Active Subscribers	**Description**: This sub-product adds optional features to Converged Policy. **Prerequisites**: Any one of the following licenses is prerequisite to license and use Oracle Communications Cloud Native Core, Converged Policy Feature Pack B - per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Converged Policy - per 25K Active Subscribers • Oracle Communications Cloud Native Core, Policy Control Function - per 25K Active Subscribers • Oracle Communications Cloud Native Core, Policy and Charging Rules Function - per 25K Active Subscribers

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Converged Signaling - per 25K Active Subscribers	**Description**: This functionality provides the Right to Use the Cloud Native Diameter Routing Agent (cnDRA), Service Communication Proxy (SCP), Network Repository Function (NRF), and InterWorking and Mediation Function (IWF) NFs. It enables a smooth transition for operators from 4G to 5G over time. Network Function license provides Console and Data Tier capabilities. **Prerequisites** : None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Converged Signaling - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions.
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Network Exposure Function - per 25K Active Subscribers	**Description:** This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Network Exposure Function (NEF) provides RESTful APIs that allow access to the services and capabilities provided by network entities and securely exposed by NEF. The NEF Northbound interface supports the following procedures: • Procedures for Monitoring • Procedures for Device Triggering • Procedures for resource management of Background Data Transfer • Procedures for Communication Pattern Parameters Provisioning • Procedures for Packet Flow Description Management • Procedures for Traffic Influence Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Network Exposure Function - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: NEF counts unique device identifiers as it processes messages

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Network Repository Function - per 25K Active Subscribers	**Description:** This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Network Repository Function (NRF) supports management and discovery services and t he management services allow for Network Function (NF) instances to be Introduced/Updated/Removed in the 5G core without manual configuration. More NRF developments will come as part of future releases. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Network Repository Function - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: If SLF is deployed in addition to the NRF: the SLF counts unique device identifiers as it processes messages. If SLF is not deployed: the subscriber count is based on the following ordered list of NFs: Ordered list of NFs: • SCP, if present • Else, a 3rd party database
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Network Repository Function Feature Pack B - per 25K Active Subscribers	**Description**: This sub-product adds optional features toNetwork Repository Function. **Prerequisites**: The following license is prerequisite to license and use Oracle Communications Cloud Native Core, Network Repository Function Feature Pack B - per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Network Repository Function – per 25K Active Subscribers

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Network Slice Selection Function - per 25K Active Subscribers	**Description:** This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Network Slice Selection Function (NSSF) provides an important capability to bring network resource utilization efficiency, deployment flexibility and support fast growing over the top (OTT) application and services. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Network Slice Selection Function - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: The subscriber count is based on the following ordered list of NFs: Ordered list of NFs: • SCP, if present • Else, a 3rd party database
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Policy Control Function - per 25K Active Subscribers	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Policy Control Function (PCF) allows the customer to support centralized policy management in their 5G core network. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None. **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Policy Control Function - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: PCF counts unique device identifiers as it processes messages.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Policy and Charging Rules Function - per 25K Active Subscribers	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. This functionality provides the Right to Use the Cloud Native Core Policy and Charging Rules Function (cnPCRF). The cnPCRF allows the customer to support centralized policy management in their 4G core network. It includes PCRF functionality. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None. **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Policy and Charging Rules Function - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: cnPCRF counts unique device identifiers as it processes messages.
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Routing and Selection Domain - per 25K Active Subscribers	**Description**: Routing and Selection domain consists of six Cloud Native Core functions: Service Communication Proxy (SCP), Network Repository Function (NRF), Network Exposure Function (NEF), Network Slice Selection Function (NSSF), Security Edge Protection Proxy (SEPP), and InterWorking and Mediation Function (IWF). Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Routing and Selection Domain - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Security Edge Protection Proxy - per 25K Active Subscribers	**Description:** This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Security Edge Protection Proxy (SEPP) is a nontransparent proxy that supports message filtering and policing on inter-PLMN control-plane interfaces and topology hiding for the PLMN network. A SEPP function should perform the firewall role for transactions between domains. Given that the SEPP is the point where integrity protection and encryption are applied, the SEPP has visibility into each aspect of a transaction. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Security Edge Protection Proxy - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: SEPP counts unique device identifiers as it processes messages.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Service Communication Proxy - per 25K Active Subscribers	**Description:** This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Service Communication Proxy (SCP) addresses introduction of 5G Service Based Architecture and the usage of HTTP/2 for signaling. Provides congestion control in cases of flooding and at the same time protect servers from being overloaded. Facilitates traffic prioritization to ensure that the higher priority traffic is addressed in overload situations Uniform Authorization/ Authentication mechanism in the network Simplifies the network and provider better visibility into the health of the network. Reduces the connection mesh to a manageable number of connections, thereby decreasing the chances of failure. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Service Communication Proxy - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: SCP counts unique device identifiers as it processes messages.
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Service Communication Proxy Feature Pack B - per 25K Active Subscribers	**Description**: This sub-product adds optional features to Service Communication Proxy. **Prerequisites**: The following license is prerequisite to license and use Oracle Communications Cloud Native Core, Service Communication Proxy Feature Pack B - per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Service Communication Proxy – per 25K Active Subscribers

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Subscriber Location Function –per 25K Active Subscribers	**Description**: This subproduct adds the following feature to the Oracle Communications Cloud Native Core. The Subscriber Location Function (SLF) is an entity of 5G network which it is used to identify a subscriber to a specific network function. This license is based on per 25k active subscribers perpetual. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: The following licenses are prerequisite to license and use Oracle Communications Cloud Native Core, Subscriber Location Function –per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Service Communication Proxy - 25K Active Subscribers • Oracle Communications Cloud Native Core, Network Repository Function - 25K Active Subscribers • Oracle Communications Cloud Native Core, Security Edge Protection Proxy - 25K Active Subscribers **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Subscriber Location Function - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: SLF counts unique device identifiers as it processes messages.
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Subscriber Location Function Feature Pack B – per 25K Active Subscribers	**Description**: This sub-product adds optional features to Subscriber Location Function. **Prerequisites**: The following license is prerequisite to license and use Oracle Communications Cloud Native Core, Subscriber Location Function Feature Pack B - per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Subscriber Location Function – per 25K Active Subscribers

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Unified Data Repository - per 25K Active Subscribers	**Description:** This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Unified Data Repository (UDR) is a functional entity that acts as a single logical repository of user data and is unique from Application Front End's perspective. Entities which do not store user data and that need to access user data stored in the UDR are collectively known as application front ends. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Unified Data Repository - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: UDR counts unique device identifiers that it has activated

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Unstructured Data Storage Function - per 25K Active Subscribers	**Description:** This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Unstructured Data Storage Function (UDSF) is a functional entity of 5G network where the Network Functions can store/ retrieve "unstructured" data. It supports data storage for stateless network functions. This data is based on the state information of different NFs, intermediate representation of data crossing different radio technologies, session related data etc. This license is based on per 25k active subscribers perpetual. Network Function license provides Console and Data Tier capabilities. **Prerequisites**: The following licenses are prerequisite to license and use Oracle Communications Cloud Native Core, Unstructured Data Storage Function – per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Unified Data Repository - 25K Active Subscribers **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Unstructured Data Storage Function - per 25K Active Subscribers, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: Since UDR is a prerequisite for UDSF. UDR counts unique device identifiers that it has activated.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Automated Test Tools and Scripts Suite - Per Node	**Description**: The sub-product adds the following features to the Oracle Communications Cloud Native Core Network Functions. The Automated Test Tools and Scripts Suite license provides tools and scripts for functional and light performance testing needs in lab environment and is licensed to only be used on Test/lab platforms. From a license perspective, this SKU is applicable only to Network Function SKUs and not to the features. *License quantity requirement is based on number of network functions (NFs) and number of system under testing (SUT). It can be calculated by multiplying number of network functions (NFs) and number of system under testing (SUT) .* **Prerequisites**: The following licenses are prerequisite to license and use Oracle Communications Cloud Native Core, Automated Test Tools and Scripts Suite – per Node. Any Oracle Communications Cloud Native Core Network Function, except: • Oracle Communications Cloud Native Core, Cloud Native Environment – 25K Active Subscribers • Oracle Communications Cloud Native Core, Interworking and Mediation Function – 25K Active Subscribers • Oracle Communications Cloud Native Core, Subscriber Location Function – per 25K Active Subscribers
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Converged Policy Feature Pack A - per 25K Active Subscribers	**Description**: This sub-product adds optional features to Converged Policy. Refer to the Cloud Native Core release notes for more details on feature content. **Prerequisites**: Any one of the following licenses is prerequisite to license and use Oracle Communications Cloud Native Core, Converged Policy Feature Pack A - per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Converged Policy - per 25K Active Subscribers • Oracle Communications Cloud Native Core, Policy Control Function - per 25K Active Subscribers • Oracle Communications Cloud Native Core, Policy and Charging Rules Function - per 25K Active Subscribers

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Service Communication Proxy Feature Pack A - per 25K Active Subscribers	**Description**: This sub-product adds optional features to Service Communication Proxy. Refer to the Cloud Native Core release notes for more details on feature content. **Prerequisites**: The following license is prerequisite to license and use Oracle Communications Cloud Native Core, Service Communication Proxy Feature Pack A - per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Service Communication Proxy – per 25K Active Subscribers
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Subscriber Location Function Feature Pack A - per 25K Active Subscribers	**Description**: This sub-product adds optional features to Subscriber Location Function. Refer to the Cloud Native Core release notes for more details on feature content. **Prerequisites**: The following license is prerequisite to license and use Oracle Communications Cloud Native Core, Subscriber Location Function Feature Pack A - per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Subscriber Location Function – per 25K Active Subscribers
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Network Repository Function Feature Pack A - per 25K Active Subscribers	**Description**: This sub-product adds optional features to Network Repository Function. Refer to the Cloud Native Core release notes for more details on feature content. **Prerequisites**: The following license is prerequisite to license and use Oracle Communications Cloud Native Core, Network Repository Function Feature Pack A - per 25K Active Subscribers: • Oracle Communications Cloud Native Core, Network Repository Function – per 25K Active Subscribers

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Network Function Cloud Native Environment for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Cloud Native Environment for NB-IoT - 25K Active Subscribers Perpetual provides tools and capabilities to run cloud native network functions in the network. This optional license provide access to following capabilities: • Cloud Native Environment (CNE) • CNCF Tools **Prerequisites**: Any one of the following licenses is prerequisite to license and use Oracle Communications Cloud Native Core, Network Function Cloud Native Environment for NB-IoT - 25K Active Subscribers Perpetual: • Oracle Communications Cloud Native Core, Binding Support Function for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Converged Policy for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Network Exposure Function for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Network Repository Function for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Network Slice Selection Function for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Policy Control Function for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Policy and Charging Rules Function for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Routing and Selection Domain for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Security Edge Protection Proxy for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Service Communication Proxy for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Unified Data Repository for NB-IoT - 25K Active Subscribers Perpetual

Product	Sub product	Licensing Information
		• Oracle Communications Cloud Native Core, Unstructured Data Storage Function for NB-IoT - 25K Active Subscribers Perpetual
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Network Exposure Function for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Network Exposure Function for NB-IoT (NEF for NB-IoT) provides RESTful APIs that allow access to the services and capabilities provided by network entities and securely exposed by NEF for NB-IoT use-case. The NEF for NB-IoT Northbound interface supports the following procedures: • Procedures for Monitoring • Procedures for Device Triggering • Procedures for resource management of Background Data Transfer • Procedures for Communication Pattern Parameters Provisioning • Procedures for Packet Flow Description Management • Procedures for Traffic Influence **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Network Exposure Function for NB-IoT - 25K Active Subscribers Perpetual includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: NEF for NB-IoT counts unique device identifiers as it processes messages

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Network Repository Function for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Network Repository Function for NB-IoT (NRF for NB-IoT) supports management and discovery services and the management services allow for Network Function (NF) instances to be Introduced/Updated/Removed in the 5G core without manual configuration. More NRF developments will come as part of future releases. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: Oracle Communications Cloud Native Core, Network Repository Function for NB-IoT - 25K Active Subscribers includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: If SLF for NB-IoT is deployed in addition to the NRF: the SLF for NB-IoT counts unique device identifiers as it processes messages. If SLF for NB-IoT is not deployed: the subscriber count is based on the following ordered list of NFs: Ordered list of NFs: • SCP, if present • Else, a 3rd party database

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Network Slice Selection Function for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Network Slice Selection Function for NB-IoT (NSSF for NB-IoT) provides an important capability to bring network resource utilization efficiency, deployment flexibility and support fast growing over the top (OTT) application and services. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Network Slice Selection Function for NB-IoT - 25K Active Subscribers Perpetual, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: The subscriber count is based on the following ordered list of NFs: Ordered list of NFs: • SCP, if present • Else, a 3rd party database
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Security Edge Protection Proxy for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Security Edge Protection Proxy for NB-IoT (SEPP NB-IoT) is a nontransparent proxy that supports message filtering and policing on inter-PLMN control-plane interfaces and topology hiding for the PLMN network. A SEPP for NB-IoT function should perform the firewall role for transactions between domains. Given that the SEPP is the point where integrity protection and encryption are applied, the SEPP NB-IoT has visibility into each aspect of a transaction. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Security Edge Protection Proxy for NB-IoT - 25K Active Subscribers includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: SEPP NB-IoT counts unique device identifiers as it processes messages.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Service Communication Proxy for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Service Communication Proxy for NB-IoT (SCP NB IoT) addresses introduction of 5G Service Based Architecture and the usage of HTTP/2 for signaling. Provides congestion control in cases of flooding and at the same time protect servers from being overloaded. Facilitates traffic prioritization to ensure that the higher priority traffic is addressed in overload situations Uniform Authorization/ Authentication mechanism in the network Simplifies the network and provider better visibility into the health of the network. Reduces the connection mesh to a manageable number of connections, thereby decreasing the chances of failure. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Service Communication Proxy for NB-IoT - 25K Active Subscribers Perpetual includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: SCP NB-IoT counts unique device identifiers as it processes messages.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Subscriber Location Function for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following feature to the Oracle Communications Cloud Native Core. The Subscriber Location Function for NB-IoT (SLF NB-IoT) is an entity of 5G network which it is used to identify a subscriber to a specific network function. This license is based on per 25k active subscribers perpetual. **Prerequisites**: One of the following licenses are prerequisite to license and use Oracle Communications Cloud Native Core, Subscriber Location Function for NB-IoT - 25K Active Subscribers Perpetual: • Oracle Communications Cloud Native Core, Service Communication Proxy for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Network Repository Function for NB-IoT - 25K Active Subscribers Perpetual • Oracle Communications Cloud Native Core, Security Edge Protection Proxy for NB-IoT - 25K Active Subscribers Perpetual **Counting Mechanism**: SLF NB-IoT counts unique device identifiers as it processes messages.
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Policy Control Function for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Policy Control Function for NB-IoT (PCF NB-IoT) allows the customer to support centralized policy management in their 5G core network. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Policy Control Function for NB-IoT - 25K Active Subscribers Perpetual includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: PCF NB-IoT counts unique device identifiers as it processes messages.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Binding Support Function for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Binding Support Function for NB-IoT (BSF NB-IoT) provides session binding functionality, which ensures request for session reaches the relevant PCF NB-IoT holding the session information. This service: • Allows Network Function (NF) consumers to register, update and remove the binding information; and • Allows Network Function (NF) consumers to retrieve the binding information. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Binding Support Function for NB-IoT - 25K Active Subscribers Perpetual, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: BSF NB-IoT counts unique device identifiers as it processes messages.
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Unified Data Repository for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Unified Data Repository for NB-IoT (UDR NB-IoT) is a functional entity that acts as a single logical repository of user data and is unique from Application Front End's perspective. Entities which do not store user data and that need to access user data stored in the UDR NB-IoT are collectively known as application front ends. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Unified Data Repository for NB-IoT - 25K Active Subscribers includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: UDR NB-IoT counts unique device identifiers that it has activated

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Unstructured Data Storage Function for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This subproduct adds the following features to the Oracle Communications Cloud Native Core. The Unstructured Data Storage Function for NB-IoT (UDSF NB-IoT) is a functional entity of 5G network where the Network Functions can store/retrieve "unstructured" data. It supports data storage for stateless network functions. This data is based on the state information of different NFs, intermediate representation of data crossing different radio technologies, session related data etc. This license is based on 25K active subscribers perpetual. **Prerequisites**: The following licenses are prerequisite to license and use Oracle Communications Cloud Native Core, Unstructured Data Storage Function - 25K Active Subscribers Perpetual: • Oracle Communications Cloud Native Core, Unified Data Repository for NB-IoT - 25K Active Subscribers Perpetual **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Unstructured Data Storage Function for NB-IoT - 25K Active Subscribers Perpetual includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: Since UDR NB-IoT is a prerequisite for UDSF NB-IoT. UDR NB-IoT counts unique device identifiers that it has activated.
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Routing and Selection Domain for NB-IoT - 25K Active Subscribers Perpetual	**Description**: Routing and Selection domain for NB-IoT consists of six Cloud Native Core functions: Service Communication Proxy for NB-IoT, Network Repository Function for NB-IoT, Network Exposure Function for NB-IoT, Network Slice Selection Function for NB-IoT, Security Edge Protection Proxy for NB-IoT, and Interworking and Mediation Function for NB-IoT. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Routing and Selection Domain for NB-IoT - 25K Active Subscribers Perpetual includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Converged Policy for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This functionality provides the Right to Use the Cloud Native Policy and Charging Rules Function for NB-IoT (cnPCRF NB-IoT) and Cloud Native Policy Control Function for NB-IoT (PCF NB-IoT) NFs. The Policy Control Function for NB-IoT allows the customer to support centralized policy management in their 5G core network. The Cloud Native Policy and Charging Rules Function for NB-IoT (cnPCRF NB-IoT) allows the customer to support centralized policy management in their 4G core network. Overall, this converged license enables customers to perform Policy management for 4G and 5G Networks as a complete solution and also enables customers to transition subscribers from 4G to 5G over time. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Converged Policy for NB-IoT - 25K Active Subscribers Perpetual, includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions.Counting Mechanism: cnPCRF NB-IoT and PCF NB-IoT counts unique device identifiers as it processes messages.
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Policy and Charging Rules Function for NB-IoT - 25K Active Subscribers Perpetual	**Description**: This sub product adds the following features to the Oracle Communications Cloud Native Core. This functionality provides the Right to Use the Cloud Native Core Policy and Charging Rules Function for NB-IoT (cnPCRF NB-IoT). The cnPCRF NB-IoT allows the customer to support centralized policy management in their 4G core network. It includes PCRF NB-IoT functionality. **Prerequisites**: None **Entitled Products and Restricted Use Licenses**: A license to Oracle Communications Cloud Native Core, Policy and Charging Rules Function for NB-IoT - 25K Active Subscribers Perpetual includes a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions. **Counting Mechanism**: cnPCRF NB-IoT counts unique device identifiers as it processes messages.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, 5G Equipment Identity Register - 25K Active Subscribers	This subproduct adds the following features to the Oracle Communications Cloud Native Core – • 5G-EIR (Equipment Identity Register) is a network function (NF) as defined by the 3rd Generation Partnership Project (3GPP) • 5G-EIR allows the telecom operator to check the status of the mobile equipment **Prerequisites**: None. **Entitled Products and Restricted Use Licenses**: None **Counting Mechanism**: EIR counts unique device identifiers as it processes messages.

Product	Sub product	Licensing Information
Oracle Communications Cloud Native Core	Oracle Communications Cloud Native Core, Automated Lifecycle Management - 25K Active Subscribers	This subproduct adds the following features to the Oracle Communications Cloud Native Core: • Continuous Delivery Control Server(CDCS). • It automates the install and upgrade processes of 5G Core Network Functions, reduces inefficiency-errors, and thus generates savings on the operational expenditure for the customer. • It automates downloading, installation, and upgrade of the CNC 5G Network Functions. **Prerequisites**: The following license is required to use Oracle Communications Cloud Native Core, Automated Lifecycle Management: • Oracle Communications Cloud Native Core, Cloud Native Environment - 25K Active Subscribers Also, any one of following licenses is required in addition to the above license: • Oracle Communications Cloud Native Core, Network Repository Function - 25K Active Subscribers • Oracle Communications Cloud Native Core, Service Communication Proxy - 25K Active Subscribers • Oracle Communications Cloud Native Core, Network Slice Selection Function - 25K Active Subscribers • Oracle Communications Cloud Native Core, Security Edge Protection Proxy - 25K Active Subscribers • Oracle Communications Cloud Native Core, Network Exposure Function - 25K Active Subscribers • Oracle Communications Cloud Native Core, Binding Support Function - per 25K Active Subscribers • Oracle Communications Cloud Native Core, Policy Control Function - 25K Active Subscribers • Oracle Communications Cloud Native Core, Converged Policy - per 25K Active Subscribers • Oracle Communications Cloud Native Core, Policy and Charging Rules Function - 25K Active Subscribers • Oracle Communications Cloud Native Core, Routing and Selection Domain - 25K Active Subscribers

Note:

25K Active Subscribers: It is defined as twenty-five thousand unique subscribers provisioned and activated or processed by the network function in a calendar month. A Subscriber is defined as (a) unique device identifier processed by the network function, (b) unique device identifier processed by a defined, external network function, (c) active entities in the subscriber database. The total number of active subscribers shall be equal to all applicable types of subscribers listed above, as defined for the network function.

Note:

NB-IoT: Programs licensed under NB-IoT are specifically for processing traffic related to "Internet of Things" (IOT) or "Machine to Machine" (M2M) devices (including, by way of example, consumer appliances such as refrigerators, utility meters, etc.), and you may not use such programs for processing traffic related to wireless services, real-time services, broadband services, wireline telephone or data subscription services.

Note:

MySQL Cluster Carrier Grade Edition needs to be downloaded separately from the Oracle Software Delivery Cloud as it is not a part of the Cloud Native Core download package. With the purchase of Oracle Communication Cloud Native Core, Network Function Cloud Native Environment, the customer is entitled to a restricted use license to MySQL Cluster Carrier Grade Edition. MySQL Cluster Carrier Grade Edition may be used solely to deploy and run Oracle Communications Cloud Native Core network functions only.

- For MySQL license manual, click here.
- For MySQL NDB Cluster licensing manual, click here.

Note:

Oracle Linux, used by all the network functions of Oracle Communications Cloud Native Core, must be downloaded separately from the Oracle Software Delivery Cloud as Oracle Linux is not a part of the Cloud Native Core download package. For more information on licensing, refer to the Oracle Linux End-User Licensing Agreement.

Note:

Oracle JDK, used by all the network functions of Oracle Communications Cloud Native Core, must be downloaded separately from the Oracle Software Delivery Cloud as Oracle JDK is not a part of the Cloud Native Core download package. For more information on licensing, refer to the Oracle JDK End-User Licensing Agreement.

Note:

Oracle Communication Cloud Native Core uses both versions of Oracle Coherence (Community Edition [CE] and Enterprise edition [EE]). For more information on their licensing, please refer to the license document/release notes:

- Oracle Coherence Enterprise Edition
- Oracle Coherence Community Edition

3
Third-Party Notices and/or Licenses

3.1 Commercial Software

Commercial software products or components distributed in Oracle Communications Cloud Native Core are identified in the following table along with the applicable licensing information.

Provider	Component(s)	Licensing Information
N/A	N/A	N/A

3.2 Open Source or Other Separately Licensed Software

Required notices for open source or other separately licensed software products or components distributed in Oracle Communications Cloud Native Core are identified in the following sections along with the applicable licensing information. Additional notices and/or licenses may be found in the included documentation or readme files of the individual third party software.

The sections below identify the open source components used by each Oracle Communications Cloud Native Core subproduct. The licensing information can be found in section **Cloud Native Core Licensing Information.**

3.2.1 Oracle Communications Cloud Native Core, Cloud Native Environment 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Core, Cloud Native Environment 23.1.0:

- OpenLDAP 2.5.13
- pyyaml 6.0
- Jenkins 2.386
- Prometheus Python Client 0.11.0
- Flask 2.0.2
- exabgp 4.2.21
- HAproxy 2.6.7
- spring-boot-starter-data-jpa 2.7.7
- spring-boot-starter 2.7.7
- spring-boot-starter-web 2.7.7
- spring-boot-starter-oauth2-resource-server 2.7.7

- Kubernetes Python Client 23.3.0
- python-json-logger 2.0.2
- spring-boot-starter-test 2.7.7
- spring-boot-starter-webflux 2.7.7
- spring-boot-starter-undertow 2.7.7
- spring-boot-starter-log4j2 2.7.7
- spring-boot-starter-actuator 2.7.7
- spring-boot-starter-validation 2.7.7
- Schedule 1.1.0
- vcd-cli 24.1.0
- Kubespray 2.20.0

3.2.2 Automated Test Suite 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Core, Automated Test Suite (ATS) 23.1.0:

- SnakeYAML 1.33
- pyyaml 6.0
- Pexpect 4.8.0
- requests 2.26.0
- Jenkins 2.389
- dnspython 2.2.1
- jackson-annotations 2.14.1
- Prometheus Python Client 0.15.0
- Flask 2.0.2
- behave 1.2.6
- jackson-databind 2.14.1
- geckodriver 0.31.0
- jackson-dataformat-yaml 2.14.1
- gorilla/mux 1.8.0
- test-results-analyzer-plugin 0.4.0
- client-go 0.22.6
- Jenkins active choices plug-in 2.6.4
- Quart 0.18.0
- kafka-python 2.0.2
- http2 0.5.0
- Kubernetes Python Client 21.7.0
- Seagull 1.8.1.2.417-0

- Prometheus Go client library 1.12.2
- jwcrypto 1.4.2
- Golang 1.17.10-1.module+el8.6.0+20691+4e76a6d9
- Pipeline Plugin 590.v6a_d052e5a_a_b_5
- colorlog 6.7.0
- Matrix Authorization Strategy Plug-in 3.1.6
- TinyDB 4.5.2
- Selenium - Python 4.2.0
- Kubernetes & OpenShift Java Client 5.12.2
- HTML Publisher Plug-in 1.31
- Simple Theme Plugin for Jenkins 146.v0e67db_a_9052e
- pytest 6.2.5
- Blue Ocean 1.27.1
- httpx 0.23.0
- Login Theme Plugin for Jenkins 1.1
- Lockable resources plug-in 1122.v14c3d52cb_1b_1
- jsonmerge 1.9.0
- Python Elasticsearch Client 7.10.1

3.2.3 Oracle Communications Cloud Native Core, Binding Support Function 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Core, Binding Support Function 23.1.0:

- Jetty 9.4.50.V20221201
- GSON 2.10
- Protocol Buffers (aka Google protobuf) 3.21.8
- XStream 1.4.20
- Lombok 1.18.22
- Javassist 3.28.0-GA
- Logback 1.3.1
- Tomcat 9.0.70
- pyyaml 6.0
- gnu tar 1.30-6
- Guava 31.1
- Commons Lang 3.12.0
- net-tools 2.0-0.52.20160912git
- Spring Framework 5.3.24

- requests 2.26.0
- dnsjava 3.5.1
- slf4j-api 1.7.32
- Jenkins 2.319.2
- winston 3.6.0
- dnspython 2.2.1
- caffeine 3.0.5
- Springfox 3.0.0
- Prometheus Python Client 0.11.0
- Flask 2.0.2
- jjwt 0.11.5
- Node.js 16.14.0-4.module+el8.6.0+20672+19f3909b
- Zipkin 2.23.16
- zipkin-reporter-java 2.16.3
- json-smart 2.4.8
- Spring Retry 1.3.4
- HikariCP 5.0.1
- python-mysqlclient 2.1.1
- lodash 4.17.21
- pandas 1.3.3
- mocha 9.2.2
- jackson-databind 2.13.4.2
- gunicorn 20.1.0
- python-dateutil 2.8.2
- hapi 20.2.1
- file-saver 2.0.5
- Equals Verifier 3.7.2
- TypeScript 4.6.4
- deep-diff 1.0.2
- jackson-datatype-jsr310 2.13.4
- metrics-core 4.1.32
- bind-utils 9.11.36-3
- JavaScript Extension Toolkit (JET) 12.1.0
- Jinja2 3.0.1
- js-yaml 4.1.0
- JSZip 3.7.1
- jersey-client 2.35

- spring-boot-starter-data-jpa 2.7.7
- spring-boot-starter-cache 2.7.7
- spring-boot-starter 2.7.7
- test-results-analyzer-plugin 0.4.0
- Jetty ReactiveStream HttpClient 1.1.12
- Jetty ReactiveStream HttpClient 3.0.6
- ip 1.1.8
- jaeger-client-js 3.19.0
- opentracing-javascript 0.14.7
- Commons IO 2.11.0
- spring-boot-starter-web 2.7.7
- spring-boot-starter-jdbc 2.7.7
- spring-boot-starter-jersey 2.7.7
- spring-boot-devtools 2.7.7
- spring-security-core 5.7.5
- Jenkins active choices plug-in 2.5.7
- Brave OpenTracing Java Bridge for Zipkin 1.0.0
- HttpComponents HttpClient 4.5.14
- jersey-server 2.35
- http2 0.0.0-20210908191846-a5e095526f91
- jenkins 2.289.3
- ipaddress 5.3.4
- spring-boot-starter-oauth2-resource-server 2.5.5
- Kubernetes Python Client 24.2.0
- bucket4j 7.6.0
- log4j-core 2.17.0
- log4j-core 2.17.1
- opentracing-spring-jaeger-web-starter 3.3.1
- OkHttp 4.10.0
- JsonPath 2.6.0
- jersey-media-multipart 2.35
- fastjson 1.2.83
- jersey-media-json-jackson 2.35
- jersey-common 2.35
- LMAX Disruptor 3.4.2
- Brave 5.14.0
- @hapi/inert 6.0.5

- @hapi/wreck 18.0.0
- @hapi/wreck 18.0.0
- log4j-api 2.17.0
- log4j-api 2.17.1
- log4j-slf4j-impl 2.17.1
- micrometer-registry-prometheus 1.9.5
- mockito-inline 4.6.1
- spring-boot-starter-test 2.7.7
- log4j-web 2.17.0
- log4j-web 2.17.1
- spring-boot-starter-webflux 2.7.7
- spring-boot-starter-undertow 2.7.7
- spring-boot-starter-jetty 2.7.7
- spring-boot-starter-log4j2 2.7.7
- import-fresh 3.3.0
- Commons CSV 1.9.0
- spring-boot-starter-actuator 2.7.7
- spring-boot-starter-web-services 2.7.7
- spring-boot-starter-oauth2-client 2.5.5
- spring-boot-starter-oauth2-client 2.6.2
- spring-boot-starter-validation 2.7.7
- Blockly 8.0.0
- jwcrypto 1.0
- Prometheus JVM Client Servlet 0.15.0
- matplotlib 3.4.3
- json-schema-validator 1.0.71
- Commons Pool 2.11.1
- jersey-hk2 2.35
- NumPy 1.22.3
- Spring Cloud Starter Gateway 3.0.7
- MyBatis Spring Boot Starter 2.2.2
- Kubernetes Java Client 16.0.0
- Pipeline Plugin 2.6
- Moment.js 2.29.4
- colorlog 6.4.1
- influxdb-java 2.22
- jQuery 3.6.1

- spring-kafka 2.8.3
- Matrix Authorization Strategy Plug-in 2.6.8
- TinyDB 4.5.1
- TinyDB 4.5.2
- wiremock 2.31.0
- okhttp-logging-interceptor 4.9.3
- Kubernetes & OpenShift Java Client 5.6.0
- log4j-jul 2.17.1
- HTML Publisher Plug-in 1.28
- HttpCore NIO 4.4.15
- spring-cloud-kubernetes-fabric8-discovery 2.1.0
- mockserver-netty 5.13.2
- coherence-spring-boot-starter 3.0.0
- mockserver-client-java 5.13.2
- jsonEditor 9.5.6
- Reactor Core 3.4.15
- Simple Theme Plugin for Jenkins 0.7
- pytest 6.2.5
- opentracing-spring-web-starter 4.1.0
- httpx 0.19.0
- jackson-datatype-joda 2.13.4
- spring-cloud-starter-kubernetes-fabric8 2.1.0
- springdoc-openapi-ui 1.6.4
- spring-cloud-starter-kubernetes-fabric8-loadbalancer 2.1.3
- Login Theme Plugin for Jenkins 1.1
- Lockable resources plug-in 2.11
- spring-cloud-starter-kubernetes-fabric8-config 2.1.3
- spring-cloud-starter-kubernetes-fabric8-all 2.1.3
- Python Elasticsearch Client 7.15.0
- reactor-test 3.4.15

3.2.4 Oracle Communications Cloud Native Configuration Console 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Configuration Console 23.1.0:

- GSON 2.10
- Protocol Buffers (aka Google protobuf) 3.21.7

- Lombok 1.18.22
- Javassist 3.28.0-GA
- tcpdump 4.9.3-3
- Jetty 11.0.11
- SnakeYAML 1.32
- gnu tar 1.30-6
- Guava 31.1
- Commons Lang 3.12.0
- net-tools 2.0-0.52.20160912git
- Spring Framework 5.3.24
- slf4j-api 1.7.32
- winston 3.6.0
- Keycloak 18.0.0
- Springfox 3.0.0
- HikariCP 5.0.1
- lodash 4.17.21
- mocha 9.2.2
- jackson-databind 2.13.4.2
- file-saver 2.0.5
- bind-utils 9.11.36-5
- JavaScript Extension Toolkit (JET) 12.1.0
- js-yaml 4.1.0
- JSZip 3.7.1
- jersey-client 2.35
- spring-boot-starter 2.7.7
- Jetty ReactiveStream HttpClient 1.1.12
- Jetty ReactiveStream HttpClient 3.0.6
- Commons IO 2.11.0
- spring-boot-starter-web 2.7.7
- spring-boot-starter-jdbc 2.7.7
- spring-security-core 5.7.5
- spring-kafka 2.9.2
- spring-boot-starter-oauth2-resource-server 2.7.7
- bucket4j 7.6.0
- log4j-core 2.17.1
- opentracing-spring-jaeger-web-starter 3.3.1
- spring-security-web 5.7.5

- JsonPath 2.6.0
- jersey-media-json-jackson 2.35
- jersey-common 2.35
- log4j-api 2.17.1
- log4j-slf4j-impl 2.17.1
- micrometer-registry-prometheus 1.9.1
- micrometer-registry-prometheus 1.9.5
- log4j-web 2.17.1
- spring-boot-starter-undertow 2.7.7
- spring-boot-starter-log4j2 2.7.7
- spring-boot-starter-actuator 2.7.4
- spring-boot-starter-actuator 2.7.7
- spring-boot-starter-oauth2-client 2.7.4
- spring-boot-starter-oauth2-client 2.7.7
- Blockly 8.0.0
- Undertow 2.3.0.Final
- jersey-hk2 2.35
- Spring Cloud Starter Gateway 3.0.7
- Kubernetes Java Client 16.0.0
- spring-security-config 5.7.5
- reactor-netty-http 1.0.24
- Kubernetes Client Java 6.1.1
- spring-cloud-kubernetes-fabric8-discovery 2.1.3
- coherence-spring-boot-starter 3.3.0
- opentracing-spring-web-starter 4.1.0
- jackson-datatype-joda 2.13.4
- spring-cloud-starter-kubernetes-fabric8-config 2.1.3
- spring-cloud-starter-kubernetes-fabric8-all 2.1.3

3.2.5 Oracle Communications Cloud Native Core, Network Exposure Function 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Core, Network Exposure Function 23.1.0:

- Lombok 1.18.22
- tcpdump 4.9.3-3
- Jetty 11.0.11
- SnakeYAML 1.32

- gnu tar 1.30-6
- Guava 31.1
- net-tools 2.0-0.52.20160912git
- dnsjava 3.5.1
- caffeine 3.0.5
- jjwt 0.11.5
- jackson-databind 2.13.4.2
- bind-utils 9.11.36-5
- spring-boot-starter-data-jpa 2.7.7
- spring-boot-starter 2.7.7
- Jetty ReactiveStream HttpClient 3.0.6
- Commons IO 2.11.0
- spring-boot-starter-web 2.7.7
- spring-boot-devtools 2.7.7
- log4j-layout-template-json 2.17.2
- spring-security-core 5.7.5
- spring-kafka 2.9.2
- ipaddress 5.3.4
- spring-boot-starter-oauth2-resource-server 2.7.7
- bucket4j 7.6.0
- opentracing-spring-jaeger-web-starter 3.3.1
- OkHttp 4.10.0
- JsonPath 2.6.0
- bcprov-ext-jdk15on 1.69
- micrometer-registry-prometheus 1.9.1
- micrometer-registry-prometheus 1.9.4
- micrometer-registry-prometheus 1.9.5
- spring-boot-starter-test 2.7.7
- spring-boot-starter-webflux 2.7.7
- spring-boot-starter-undertow 2.7.7
- spring-boot-starter-log4j2 2.7.7
- spring-boot-starter-actuator 2.7.7
- spring-boot-starter-oauth2-client 2.7.7
- spring-boot-starter-validation 2.7.7
- reactor-core 3.4.18
- json-schema-validator 1.0.74
- Undertow 2.3.0.Final

- Spring Cloud Starter Gateway 3.0.7
- HttpComponents Client 5.1.3
- Kubernetes Java Client 16.0.0
- Kubernetes Java Client 15.0.1
- okhttp-logging-interceptor 4.9.3
- spring-security-config 5.7.5
- reactor-netty-http 1.0.16
- reactor-netty-http 1.0.24
- spring-cloud-kubernetes-fabric8-discovery 2.1.3
- coherence-spring-boot-starter 3.3.0
- springdoc-openapi-ui 1.6.4
- spring-cloud-starter-kubernetes-fabric8-config 2.1.3

3.2.6 Oracle Communications Cloud Native Core, Network Repository Function 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Core, Network Repository Function 23.1.0:

- GSON 2.8.9
- Protocol Buffers (aka Google protobuf) 3.21.7
- Lombok 1.18.22
- tcpdump 4.9.3-3
- Jetty 11.0.11
- SnakeYAML 1.31
- pyyaml 6.0
- gnu tar 1.30-6
- Guava 31.1
- net-tools 2.0-0.52.20160912git
- requests 2.26.0
- dnsjava 3.5.1
- slf4j-api 1.7.32
- caffeine 3.0.5
- jackson-core 2.13.1
- Springfox 3.0.0
- Prometheus Python Client 0.11.0
- Prometheus Python Client 0.15.0
- Flask 2.0.2
- jjwt 0.11.5

- Spring Retry 1.3.3
- pandas 1.3.3
- jackson-databind 2.13.4.2
- gunicorn 20.1.0
- python-dateutil 2.8.2
- bind-utils 9.11.36-5
- JavaScript Extension Toolkit (JET) 12.1.0
- Jinja2 3.0.1
- JSZip 3.7.1
- jersey-client 2.35
- spring-boot-starter-cache 2.7.7
- Jetty ReactiveStream HttpClient 3.0.6
- Commons IO 2.11.0
- spring-boot-starter-web 2.7.7
- log4j-layout-template-json 2.17.2
- spring-security-core 5.7.5
- spring-kafka 2.9.2
- ipaddress 5.3.4
- Kubernetes Python Client 24.2.0
- log4j-core 2.17.1
- opentracing-spring-jaeger-web-starter 3.3.1
- spring-security-web 5.7.5
- log4j-api 2.17.1
- log4j-slf4j-impl 2.17.1
- micrometer-registry-prometheus 1.9.1
- micrometer-registry-prometheus 1.9.5
- log4j-web 2.17.1
- spring-boot-starter-undertow 2.7.7
- spring-boot-starter-log4j2 2.7.7
- spring-boot-starter-validation 2.7.7
- matplotlib 3.4.3
- json-schema-validator 1.0.74
- Undertow 2.3.0.Final
- jersey-hk2 2.35
- NumPy 1.22.3
- Spring Cloud Starter Gateway 3.0.7
- Kubernetes Java Client 16.0.0

- spring-security-config 5.7.5
- reactor-netty-http 1.0.24
- spring-cloud-kubernetes-fabric8-discovery 2.1.3
- coherence-spring-boot-starter 3.3.0
- Reactor Core 3.4.15
- opentracing-spring-web-starter 4.1.0
- jackson-datatype-joda 2.13.1
- springdoc-openapi-ui 1.6.4
- spring-cloud-starter-kubernetes-fabric8-config 2.1.3
- spring-cloud-starter-kubernetes-fabric8-all 2.1.3

3.2.7 Oracle Communications Cloud Native Core, Network Slice Selection Function 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Core, Network Slice Selection Function 23.1.0:

- Protocol Buffers (aka Google protobuf) 3.21.7
- Jetty 11.0.11
- SnakeYAML 1.32
- Guava 31.1
- dnsjava 3.5.1
- jackson-core 2.13.1
- Springfox 3.0.0
- jjwt 0.11.5
- jackson-databind 2.13.4.2
- spring-boot-starter-data-jpa 2.7.7
- spring-boot-starter-cache 2.7.7
- spring-boot-starter 2.7.7
- Jetty ReactiveStream HttpClient 3.0.6
- Commons IO 2.11.0
- spring-boot-starter-web 2.7.7
- spring-boot-starter-jdbc 2.7.7
- spring-security-core 5.7.5
- ipaddress 5.3.4
- spring-boot-starter-oauth2-resource-server 2.7.7
- bucket4j 7.6.0
- opentracing-spring-jaeger-web-starter 3.3.1
- OkHttp 4.10.0

- bcprov-ext-jdk15on 1.69
- micrometer-registry-prometheus 1.9.1
- spring-boot-starter-undertow 2.7.7
- spring-boot-starter-log4j2 2.7.7
- spring-boot-starter-actuator 2.7.7
- spring-boot-starter-oauth2-client 2.7.4
- spring-boot-starter-oauth2-client 2.7.7
- spring-boot-starter-validation 2.7.7
- reactor-core 3.4.18
- json-schema-validator 1.0.74
- Undertow 2.3.0.Final
- Spring Cloud Starter Gateway 3.0.7
- HttpComponents Client 5.1.3
- Kubernetes Java Client 16.0.0
- spring-security-config 5.7.5
- reactor-netty-http 1.0.24
- spring-cloud-kubernetes-fabric8-discovery 2.1.3
- coherence-spring-boot-starter 3.3.0
- opentracing-spring-web-starter 4.1.0
- spring-cloud-starter-kubernetes-fabric8 2.1.0
- springdoc-openapi-ui 1.6.4
- spring-cloud-starter-kubernetes-fabric8-config 2.1.3
- spring-cloud-starter-kubernetes-fabric8-all 2.1.3

3.2.8 Oracle Communications Cloud Native Core, Cloud Native Core Policy 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Core, Cloud Native Core Policy 23.1.0:

- Jetty 9.4.50.V20221201
- GSON 2.10
- Protocol Buffers (aka Google protobuf) 3.21.8
- XStream 1.4.20
- Lombok 1.18.22
- Javassist 3.28.0-GA
- Logback 1.3.1
- Tomcat 9.0.70
- pyyaml 6.0

- gnu tar 1.30-6
- Guava 31.1
- Commons Lang 3.12.0
- net-tools 2.0-0.52.20160912git
- Spring Framework 5.3.24
- requests 2.26.0
- dnsjava 3.5.1
- slf4j-api 1.7.32
- Jenkins 2.319.2
- winston 3.6.0
- dnspython 2.2.1
- caffeine 3.0.5
- Springfox 3.0.0
- Prometheus Python Client 0.11.0
- Flask 2.0.2
- jjwt 0.11.5
- Node.js 16.14.0-4.module+el8.6.0+20672+19f3909b
- Zipkin 2.23.16
- zipkin-reporter-java 2.16.3
- json-smart 2.4.8
- Spring Retry 1.3.4
- HikariCP 5.0.1
- python-mysqlclient 2.1.1
- lodash 4.17.21
- pandas 1.3.3
- mocha 9.2.2
- jackson-databind 2.13.4.2
- gunicorn 20.1.0
- python-dateutil 2.8.2
- hapi 20.2.1
- file-saver 2.0.5
- jackson-dataformat-yaml 2.14.1
- Equals Verifier 3.7.2
- TypeScript 4.6.4
- deep-diff 1.0.2
- jackson-datatype-jsr310 2.13.4
- metrics-core 4.1.32

- bind-utils 9.11.36-3
- JavaScript Extension Toolkit (JET) 12.1.0
- Jinja2 3.0.1
- js-yaml 4.1.0
- JSZip 3.7.1
- jersey-client 2.35
- spring-boot-starter-data-jpa 2.7.7
- spring-boot-starter-cache 2.7.7
- spring-boot-starter 2.7.7
- test-results-analyzer-plugin 0.4.0
- Jetty ReactiveStream HttpClient 1.1.12
- Jetty ReactiveStream HttpClient 3.0.6
- ip 1.1.8
- jaeger-client-js 3.19.0
- opentracing-javascript 0.14.7
- Commons IO 2.11.0
- spring-boot-starter-web 2.7.7
- spring-boot-starter-jdbc 2.7.7
- spring-boot-starter-jersey 2.7.7
- spring-boot-devtools 2.7.7
- spring-security-core 5.7.5
- Jenkins active choices plug-in 2.5.7
- Brave OpenTracing Java Bridge for Zipkin 1.0.0
- HttpComponents HttpClient 4.5.14
- jersey-server 2.35
- http2 0.0.0-20210908191846-a5e095526f91
- jenkins 2.289.3
- ipaddress 5.3.4
- spring-boot-starter-oauth2-resource-server 2.5.5
- Kubernetes Python Client 24.2.0
- bucket4j 7.6.0
- log4j-core 2.17.0
- log4j-core 2.17.1
- opentracing-spring-jaeger-web-starter 3.3.1
- OkHttp 4.10.0
- JsonPath 2.6.0
- jersey-media-multipart 2.35

- fastjson 1.2.83
- jersey-media-json-jackson 2.35
- jersey-common 2.35
- LMAX Disruptor 3.4.2
- Brave 5.14.0
- @hapi/inert 6.0.5
- @hapi/wreck 18.0.0
- @hapi/wreck 18.0.0
- log4j-api 2.17.0
- log4j-api 2.17.1
- log4j-slf4j-impl 2.17.1
- micrometer-registry-prometheus 1.9.5
- mockito-inline 4.6.1
- spring-boot-starter-test 2.7.7
- log4j-web 2.17.0
- log4j-web 2.17.1
- spring-boot-starter-webflux 2.7.7
- spring-boot-starter-undertow 2.7.7
- spring-boot-starter-jetty 2.7.7
- spring-boot-starter-log4j2 2.7.7
- import-fresh 3.3.0
- Commons CSV 1.9.0
- spring-boot-starter-actuator 2.7.7
- spring-boot-starter-web-services 2.7.7
- spring-boot-starter-oauth2-client 2.5.5
- spring-boot-starter-oauth2-client 2.6.2
- spring-boot-starter-validation 2.7.7
- Blockly 8.0.0
- jwcrypto 1.0
- Prometheus JVM Client Servlet 0.15.0
- matplotlib 3.4.3
- json-schema-validator 1.0.71
- Commons Pool 2.11.1
- jersey-hk2 2.35
- NumPy 1.22.3
- Spring Cloud Starter Gateway 3.0.7
- MyBatis Spring Boot Starter 2.2.2

- Kubernetes Java Client 16.0.0
- Pipeline Plugin 2.6
- Moment.js 2.29.4
- colorlog 6.4.1
- influxdb-java 2.22
- jQuery 3.6.1
- spring-kafka 2.8.3
- Matrix Authorization Strategy Plug-in 2.6.8
- TinyDB 4.5.1
- TinyDB 4.5.2
- wiremock 2.31.0
- okhttp-logging-interceptor 4.9.3
- Kubernetes & OpenShift Java Client 5.6.0
- log4j-jul 2.17.1
- HTML Publisher Plug-in 1.28
- HttpCore NIO 4.4.15
- spring-cloud-kubernetes-fabric8-discovery 2.1.0
- mockserver-netty 5.13.2
- coherence-spring-boot-starter 3.0.0
- mockserver-client-java 5.13.2
- jsonEditor 9.5.6
- Reactor Core 3.4.15
- Simple Theme Plugin for Jenkins 0.7
- pytest 6.2.5
- opentracing-spring-web-starter 4.1.0
- httpx 0.19.0
- jackson-datatype-joda 2.13.4
- spring-cloud-starter-kubernetes-fabric8 2.1.0
- springdoc-openapi-ui 1.6.4
- spring-cloud-starter-kubernetes-fabric8-loadbalancer 2.1.3
- Login Theme Plugin for Jenkins 1.1
- Lockable resources plug-in 2.11
- Lockable resources plug-in 1106.vc9153f1a_ff25
- spring-cloud-starter-kubernetes-fabric8-config 2.1.3
- spring-cloud-starter-kubernetes-fabric8-all 2.1.3
- Python Elasticsearch Client 7.15.0
- reactor-test 3.4.15

3.2.9 Oracle Communications Cloud Native Core, Security Edge Protection Proxy 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Core, Security Edge Protection Proxy 23.1.0:

- Jetty 11.0.13
- Jetty 9.4.50.V20221201
- GSON 2.10
- Protocol Buffers (aka Google protobuf) 3.21.7
- Drools 8.32.0.Final
- Lombok 1.18.22
- Logback 1.3.1
- tcpdump 4.9.3-3
- Jetty 11.0.11
- SnakeYAML 1.32
- pyyaml 6.0
- gnu tar 1.30-6
- Guava 31.1
- Commons Lang 3.12.0
- net-tools 2.0-0.52.20160912git
- Spring Framework 5.3.24
- requests 2.26.0
- dnsjava 3.5.1
- jackson-core 2.13.1
- jackson-core 2.13.2
- jackson-annotations 2.13.1
- Springfox 3.0.0
- Prometheus Python Client 0.11.0
- Flask 2.0.2
- jjwt 0.11.5
- pandas 1.3.3
- jackson-databind 2.13.4.2
- gunicorn 20.1.0
- python-dateutil 2.8.2
- JSON in Java 20220320
- bind-utils 9.11.36-5
- Jinja2 3.0.1

- org.jacoco.agent 0.8.7
- jersey-client 2.35
- spring-boot-starter-data-jpa 2.7.7
- spring-boot-starter-cache 2.7.7
- spring-boot-starter 2.7.7
- Jetty ReactiveStream HttpClient 1.1.12
- Jetty ReactiveStream HttpClient 3.0.6
- Commons IO 2.11.0
- spring-boot-starter-web 2.7.7
- spring-boot-starter-jdbc 2.7.7
- log4j-layout-template-json 2.17.2
- spring-security-core 5.7.5
- spring-kafka 2.9.2
- HttpComponents HttpClient 4.5.14
- ipaddress 5.3.4
- spring-boot-starter-oauth2-resource-server 2.7.7
- Kubernetes Python Client 24.2.0
- bucket4j 7.6.0
- log4j-core 2.17.1
- opentracing-spring-jaeger-web-starter 3.3.1
- spring-security-web 5.7.5
- OkHttp 4.10.0
- JsonPath 2.6.0
- bcprov-ext-jdk15on 1.69
- jersey-media-json-jackson 2.35
- LMAX Disruptor 3.4.2
- log4j-api 2.17.1
- micrometer-registry-prometheus 1.9.1
- micrometer-registry-prometheus 1.9.5
- micrometer-registry-prometheus 1.9.5
- spring-boot-starter-test 2.7.7
- log4j-web 2.17.1
- spring-boot-starter-webflux 2.7.7
- spring-boot-starter-undertow 2.7.7
- spring-boot-starter-log4j2 2.7.7
- spring-boot-starter-actuator 2.7.7
- spring-boot-starter-oauth2-client 2.7.7

- spring-boot-starter-validation 2.7.7
- reactor-core 3.4.18
- reactor-core 3.5.0
- matplotlib 3.4.3
- json-schema-validator 1.0.71
- json-schema-validator 1.0.74
- Undertow 2.3.0.Final
- jersey-hk2 2.35
- NumPy 1.22.3
- Spring Cloud Starter Gateway 3.0.7
- HttpComponents Client 5.1.3
- Kubernetes Java Client 16.0.0
- okhttp-logging-interceptor 4.9.3
- spring-security-config 5.7.5
- Kubernetes Client Java 6.1.1
- spring-cloud-kubernetes-fabric8-discovery 2.1.3
- coherence-spring-boot-starter 3.3.0
- Reactor Core 3.4.15
- opentracing-spring-web-starter 4.1.0
- jackson-datatype-joda 2.13.4
- springdoc-openapi-ui 1.6.4
- spring-cloud-starter-kubernetes-fabric8-config 2.1.3
- spring-cloud-starter-kubernetes-fabric8-all 2.1.3

3.2.10 Oracle Communications Cloud Native Core, Service Communication Proxy 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Core, Service Communication Proxy 23.1.0:

- Drools 7.67.0.Final
- tcpdump 4.9.3-3
- Jetty 11.0.11
- gnu tar 1.30-6
- Commons Lang 3.12.0
- net-tools 2.0-0.52.20160912git
- dnsjava 3.5.1
- Spring Retry 1.3.3
- jackson-databind 2.13.4.2

- jackson-dataformat-yaml 2.13.4
- JSON in Java 20220320
- bind-utils 9.11.36-5
- spring-boot-starter-data-jpa 2.7.7
- spring-boot-starter 2.7.7
- Jetty ReactiveStream HttpClient 3.0.6
- Commons IO 2.11.0
- client-go 0.22.6
- spring-kafka 2.9.2
- ipaddress 5.3.4
- bucket4j 7.6.0
- opentracing-spring-jaeger-web-starter 3.3.1
- micrometer-registry-prometheus 1.9.1
- zjsonpatch 0.4.12
- spring-boot-starter-webflux 2.7.7
- spring-boot-starter-undertow 2.7.7
- spring-boot-starter-log4j2 2.7.7
- jackson-module-afterburner 2.13.4
- spring-boot-starter-actuator 2.7.7
- spring-boot-starter-validation 2.7.7
- reactor-core 3.4.18
- Kubernetes Java Client 16.0.0
- reactor-netty-http 1.0.16
- jackson-datatype-joda 2.13.4
- springdoc-openapi-ui 1.6.11

3.2.11 Oracle Communications Cloud Native Core, Unified Data Repository 23.1.0 Components

The following is the list of components for Oracle Communications Cloud Native Core, Unified Data Repository 23.1.0:

- Jetty 9.4.48.v20220622
- Jetty 11.0.13
- Protocol Buffers (aka Google protobuf) 3.21.7
- Lombok 1.18.22
- Spring Batch 4.3.6
- tcpdump 4.9.3-3
- SnakeYAML 1.32

- pyyaml 6.0
- gnu tar 1.30-6
- Guava 31.1
- net-tools 2.0-0.52.20160912git
- requests 2.26.0
- dnsjava 3.5.1
- slf4j-api 1.7.32
- caffeine 3.0.5
- jackson-core 2.13.0
- jackson-core 2.13.1
- Prometheus Python Client 0.11.0
- Flask 2.0.2
- jjwt 0.11.5
- Spring Retry 1.3.3
- Spring Retry 1.3.4
- pandas 1.3.3
- jackson-databind 2.13.4.2
- gunicorn 20.1.0
- JSON Schema 1.14.1
- python-dateutil 2.8.2
- Commons Text 1.10.0
- JSON in Java 20220320
- bind-utils 9.11.36-5
- Jinja2 3.0.1
- jersey-client 2.35
- spring-boot-starter-data-jpa 2.7.7
- spring-boot-starter 2.7.7
- Jetty ReactiveStream HttpClient 3.0.6
- Commons IO 2.11.0
- spring-boot-starter-web 2.7.7
- spring-boot-starter-jdbc 2.7.7
- log4j-layout-template-json 2.17.2
- spring-security-core 5.7.5
- spring-kafka 2.9.2
- ipaddress 5.3.4
- spring-boot-starter-oauth2-resource-server 2.7.7
- Kubernetes Python Client 24.2.0

- bucket4j 7.6.0
- log4j-core 2.17.1
- opentracing-spring-jaeger-web-starter 3.3.1
- CXF 3.5.5
- spring-security-web 5.7.5
- OkHttp 4.10.0
- log4j-api 2.17.1
- log4j-slf4j-impl 2.17.1
- micrometer-registry-prometheus 1.9.1
- micrometer-registry-prometheus 1.9.4
- mockito-inline 4.6.1
- spring-boot-starter-test 2.7.7
- log4j-web 2.17.1
- spring-boot-starter-undertow 2.7.7
- spring-boot-starter-log4j2 2.7.7
- spring-boot-starter-actuator 2.7.7
- spring-boot-starter-oauth2-client 2.7.7
- spring-boot-starter-validation 2.7.7
- matplotlib 3.4.3
- json-schema-validator 1.0.74
- Undertow 2.3.0.Final
- jersey-hk2 2.35
- NumPy 1.22.3
- Spring Cloud Starter Gateway 3.0.7
- HttpComponents Client 5.1.3
- spring-integration-file 5.5.13
- Kubernetes Java Client 16.0.0
- okhttp-logging-interceptor 4.9.3
- spring-security-config 5.7.5
- reactor-netty-http 1.0.16
- Kubernetes Client Java 6.1.1
- spring-cloud-kubernetes-fabric8-discovery 2.1.3
- coherence-spring-boot-starter 3.3.0
- opentracing-spring-web-starter 4.1.0
- jackson-datatype-joda 2.13.4
- springdoc-openapi-ui 1.6.4
- spring-cloud-starter-kubernetes-fabric8-config 2.1.3

- spring-cloud-starter-kubernetes-fabric8-all 2.1.3

3.2.12 Oracle Communications Cloud Native Core, Licensing Information

Table 3-1 Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Google	Protocol Buffers (aka Google protobuf) 3.21.7 Protocol Buffers (aka Google protobuf) 3.21.8	From the LICENSE file in the download packages URL for License and Copyright Notice - https://github.com/protocolbuffers/protobuf/blob/master/LICENSE Copyright 2008 Google Inc. All rights reserved. See Appendix M Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license.
FasterXML, LLC	jackson-module-afterburner 2.13.4	Apache 2.0 See Appendix E
Flipkart	zjsonpatch 0.4.012	Apache 2.0 See Appendix E
SnakeYAML.org	SnakeYAML 1.31 SnakeYAML 1.32	Apache 2.0 See Appendix E
Project Reactor	reactor-netty-http 1.0.16 reactor-netty-http 1.0.24	Apache 2.0 See Appendix E
fabric8io	Kubernetes Client Java 6.1.1	Apache 2.0 See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
vcd-cli	vcd-cli 24.0.1	VMware vCloud Director CLI Copyright (c) 2018 VMware, Inc. All rights reserved The Apache 2.0 license (the “License”) set forth below applies to all parts of the VMware vCloud Director CLI project. You may not use this file except in compliance with the License. Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ See Appendix E 4P Dependency: click >= 7.0 -> BSD colorama >= 0.3.9 -> BSD keyring >= 10.6.0, <= 12.0.0 -> MIT pycryptodome == 3.6.6 -> BSD pypiwin32 >= 223;platform_system=="Windows" pyvcloud >= 23.0.1, < 24.0.0 -> Apache 2.0 tabulate >= 0.7.5 -> MIT unittest-xml-reporting >= 2.2.1 -> BSD click >= 7.0 Copyright 2014 Pallets See Appendix M colorama >= 0.3.9 Copyright (c) 2010 Jonathan Hartley All rights reserved. See Appendix M keyring >= 10.6.0, <= 12.0.0 -> MIT Copyright Jason R. Coombs See Appendix G pycryptodome == 3.6.6 The source code in PyCryptodome is partially in the public domain and partially released under the BSD 2-Clause license. In either case, there are minimal if no restrictions on the redistribution, modification and usage of the software. Public domain All code originating from PyCrypto is free and unencumbered software released into the public domain. Anyone is free to copy, modify, publish, use, compile, sell, or distribute this software, either in source code

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		form or as a compiled binary, for any purpose, commercial or non-commercial, and by any means. In jurisdictions that recognize copyright laws, the author or authors of this software dedicate any and all copyright interest in the software to the public domain. We make this dedication for the benefit of the public at large and to the detriment of our heirs and successors. We intend this dedication to be an overt act of relinquishment in perpetuity of all present and future rights to this software under copyright law. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. For more information, please refer to BSD license All direct contributions to PyCryptodome are released under the following license. The copyright of each piece belongs to the respective author. See Appendix M OCB license The OCB cipher mode is patented in the US under patent numbers 7,949,129 and 8,321,675. The directory Doc/ocb contains three free licenses for implementors and users. As a general statement, OCB can be freely used for software not meant for military purposes. Contact your attorney for further information. pyvcloud >= 23.0.1, < 24.0.0 -> Apache 2.0 pyvCloud Copyright 2018 VMware, Inc. All rights reserved. The Apache 2.0 license (the "License") set forth below applies to all parts of the pyvCloud project. You may not use this file except in compliance with the License. Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ See Appendix E tabulate >= 0.7.5

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2011-2020 Sergey Astanin and contributors See Appendix G unittest-xml-reporting >= 2.2.1 Copyright (c) 2008-2013, Daniel Fernandes Martins All rights reserved. See Appendix M The views and conclusions contained in the software and documentation are those of the authors and should not be interpreted as representing official policies, either expressed or implied, of the FreeBSD Project.
Amenezes	config-client 1.0.1	Apache License, version 2.0 - See Appendix E
JBoss Open Source Community	Undertow 2.3.0 Final Undertow 2.7.4	Apache License, version 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Apache 2.0	Tensorflow 2.8.1	== Tensorflow: +---And 4th party: absl-py, flatbuffers, google-pasta, keras, tensorflow-estimator, grpcio, tensorflow-io-gcs-filesystem Apache License, version 2.0 - See Appendix E ========== +--- 4th party: astunparse Copyright (c) 2014, Simon Percivall All rights reserved. See Appendix M PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2 --- 1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee. 3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement. ========== +--- 4th party: gast Copyright (c) 2016, Serge Guelton All rights reserved. See Appendix M ========== +--- 4th party: h5py

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2008 Andrew Collette and contributors All rights reserved. See Appendix M ========== +--- 4th party: keras-preprocessing COPYRIGHT Copyright (c) 2015 - 2018, the respective contributors. All rights reserved. Each contributor holds copyright over their respective contributions. The project versioning (Git) records all such contribution source information. The initial code of this repository came from https://github.com/keras-team/keras (the Keras repository), hence, for author information regarding commits that occured earlier than the first commit in the present repository, please see the original Keras repository. LICENSE MIT License See Appendix G ========== +--- 4th party: libclang ========== The LLVM Project is under the Apache License v2.0 with LLVM Exceptions: ========== ========== Software from third parties included in the LLVM Project: ========== The LLVM Project contains third party software which is under different license terms. All such code will be identified clearly using at least one of two mechanisms: 1) It will be in a separate directory tree with its own `LICENSE.txt` or `LICENSE` file at the top containing the specific license and restrictions

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		which apply to that software, or 2) It will contain specific license and restriction terms at the top of every file. ========== Legacy LLVM License (https://llvm.org/docs/DeveloperPolicy.html#legacy): ========== University of Illinois/NCSA Open Source License Copyright (c) 2007-2019 University of Illinois at Urbana-Champaign. All rights reserved. Developed by: LLVM Team University of Illinois at Urbana-Champaign http://llvm.org See Appendix G * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimers. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimers in the documentation and/or other materials provided with the distribution. * Neither the names of the LLVM Team, University of Illinois at Urbana-Champaign, nor the names of its contributors may be used to endorse or promote products derived from this Software without specific prior written permission. See Appendix G ========== +--- 4th party: numpy Numpy (License and Copyright) Copyright (c) 2005-2022, NumPy Developers. All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---- This binary distribution of NumPy also bundles the following software: Name: OpenBLAS Files: extra-dll\libopenb*.dll Description: bundled as a dynamically linked library Availability: https://github.com/xianyi/OpenBLAS/ License: 3-clause BSD Copyright (c) 2011-2014, The OpenBLAS Project All rights reserved. See Appendix M Name: LAPACK Files: extra-dll\libopenb*.dll Description: bundled in OpenBLAS Availability: https://github.com/xianyi/OpenBLAS/ License 3-clause BSD Copyright (c) 1992-2013 The University of Tennessee and The University of Tennessee Research Foundation. All rights reserved. Copyright (c) 2000-2013 The University of California Berkeley. All rights reserved. Copyright (c) 2006-2013 The University of Colorado Denver. All rights reserved. $COPYRIGHT$ Additional copyrights may follow $HEADER$ See Appendix M ---------- -------- LICENSES_bundled.txt ---------- -------- The NumPy repository and source distributions bundle several libraries that are compatibly licensed. We list these here. Name: lapack-lite Files: numpy/linalg/lapack_lite/* License: BSD-3-Clause For details, see numpy/linalg/lapack_lite/LICENSE.txt

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Name: tempita Files: tools/npy_tempita/* License: MIT For details, see tools/npy_tempita/license.txt Name: dragon4 Files: numpy/core/src/multiarray/dragon4.c License: MIT For license text, see numpy/core/src/multiarray/dragon4.c Name: libdivide Files: numpy/core/include/numpy/libdivide/* License: Zlib For license text, see numpy/core/include/numpy/libdivide/LICENSE.txt ---------- RECURSIVE LICENSE Mentioned in LICENSES_bundled.txt ---------- ---------- lapack-lite Copyright (c) 1992-2022 The University of Tennessee and The University of Tennessee Research Foundation. All rights reserved. Copyright (c) 2000-2022 The University of California Berkeley. All rights reserved. Copyright (c) 2006-2022 The University of Colorado Denver. All rights reserved. Additional copyrights may follow See Appendix M ---------- tempita Copyright (c) 2022 Ian Bicking and Contributors See Appendix G ---------- - dragon4 Copyright (c) 2022 Ryan Juckett See Appendix G ---------- ----- libdivide

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		zlib License Copyright (C) 2010 - 2022 ridiculous_fish, Copyright (C) 2016 - 2022 Kim Walisch, This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software. Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions: 1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required. 2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software. 3. This notice may not be removed or altered from any source distribution. ---------- LICENSES_bundled in different directories: ---------- The NumPy repository and source distributions bundle several libraries that are compatibly licensed. We list these here. Name: SPLITMIX64 Files: /numpy/blob/numpy/random/src/splitmix64/* License: Sebastiano Vigna © 2005–2019 NumPy Developers, Licensed under the 3-clause BSD License. For details, see /numpy/blob/numpy/random/src/splitmix64/LICENSE.md Name: SFC64 Files: /numpy/blob/numpy/random/src/sfc64/* License: MIT For details, see /numpy/blob/numpy/random/src/sfc64/LICENSE.md Name: PHILOX

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Files: /numpy/blob/numpy/random/src/philox/* License: D. E. Shaw Research For license text, see /numpy/blob/numpy/random/src/philox/LICENSE.md Name: PCG64 Files: /numpy/blob/numpy/random/src/pcg64/* License: MIT For license text, see/numpy/blob/numpy/random/src/pcg64/LICENSE.md Name: MT19937 Files: /numpy/blob/numpy/random/src/mt19937/* License: MIT For license text, see/numpy/blob/numpy/random/src/mt19937/LICENSE.md Name: Julia Files: /numpy/blob/numpy/random/src/distributions/* License: Jeff Bezanson, Stefan Karpinski, Viral B. Shah, and other contributors For license text, see/numpy/blob/numpy/random/src/distributions/LICENSE.md Name: Random Files: /numpy/blob/numpy/random/* License: dual-licensed under the The University of Illinois/NCSA Open Source License (NCSA) and The 3-Clause BSD License For license text, see/numpy/blob/numpy/random/LICENSE.md Name: nympy.core.ma Files: /numpy/blob/numpy/ma/* License: University of Georgia and Pierre G.F. Gerard-Marchant For license text, see /numpy/blob/numpy/ma/LICENSE ---------- RECURSIVE LICENSE Mentioned in LICENSES_bundled in different directories (list above) ---------- ---------- ---------- Name: SPLITMIX64 Written in 2015 by Sebastiano Vigna (vigna@acm.org) To the extent possible under law, the author has dedicated all copyright and related and neighboring rights to this software to the public domain worldwide. This software is distributed without any warranty. See http://creativecommons.org/publicdomain/zero/1.0/.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		--- --- Name: SFC64 © 2005–2019 NumPy Developers, Licensed under the 3-clause BSD License. MIT License See Appendix G --- --- Name: PHILOX Copyright 2010-2012, D. E. Shaw Research. All rights reserved. See Appendix M --- --- Name: PCG64 MIT License See Appendix G --- --- Name: MT19937 Copyright (c) 2003-2005, Jean-Sebastien Roy (js@jeannot.org) The rk_random and rk_seed functions algorithms and the original design of the Mersenne Twister RNG: Copyright (C) 1997 - 2002, Makoto Matsumoto and Takuji Nishimura, All rights reserved. See Appendix M Original algorithm for the implementation of rk_interval function from Richard J. Wagner's implementation of the Mersenne Twister RNG, optimised by Magnus Jonsson. Constants used in the rk_double implementation by Isaku Wada. See Appendix G --- --- Name: Julia The ziggurat methods were derived from Julia. Copyright (c) 2009-2019: Jeff Bezanson, Stefan Karpinski, Viral B. Shah, and other contributors: https://github.com/JuliaLang/julia/contributors See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- ----------
		Name: Random
		NCSA Open Source License
		Copyright (c) 2019 Kevin Sheppard. All rights reserved.
		Developed by: Kevin Sheppard (kevin.sheppard@economics.ox.ac.uk, kevin.k.sheppard@gmail.com) http://www.kevinsheppard.com
		See Appendix G
		Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimers.
		Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimers in the documentation and/or other materials provided with the distribution.
		Neither the names of Kevin Sheppard, nor the names of any contributors may be used to endorse or promote products derived from this Software without specific prior written permission.
		See Appendix G
		3-Clause BSD License
		Copyright (c) 2019 Kevin Sheppard. All rights reserved.
		See Appendix M
		Components
		Many parts of this module have been derived from original sources, often the algorithm's designer. Component licenses are located with the component code.
		---------- ----------
		Name: nympy.core.ma
		Copyright (c) 2006, University of Georgia and Pierre G.F. Gerard-Marchant
		All rights reserved.
		See Appendix M
		========== ==========
		+--- 4th party: opt-einsum
		MIT License See Appendix G
		========== ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		+--- 4th party: protobuf Copyright 2008 Google Inc. All rights reserved. See Appendix M Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license. ========== +--- 4th party: setuptools Copyright Jason R. Coombs See Appendix G ========== +--- 4th party: six Copyright (c) 2010-2020 Benjamin Peterson See Appendix G ========== +--- 4th party: termcolor Copyright (c) 2013, Ihor Kalnytskyi. All rights reserved. Redistribution and use in source and binary forms of the software as well as documentation, with or without modification, are permitted provided that the following conditions are met: * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. * The names of the contributors may not be used to endorse or promote products derived from this software without specific

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		prior written permission. THIS SOFTWARE AND DOCUMENTATION IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE AND DOCUMENTATION, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ========== ========== +--- 4th party: typing-extensions A. HISTORY OF THE SOFTWARE ========== Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others. In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software. In May 2000, Guido and the Python core development team moved to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations (now Zope Corporation, see http://www.zope.com). In 2001, the Python Software Foundation (PSF, see http://www.python.org/psf/) was formed, a non-profit organization created specifically to own Python-related Intellectual Property. Zope Corporation is a sponsoring member of the PSF. All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases. Release Derived Year Owner GPL- from compatible? (1) 0.9.0 thru 1.2 1991-1995 CWI yes 1.3 thru 1.5.2 1.2 1995-1999 CNRI yes 1.6 1.5.2 2000 CNRI no 2.0 1.6 2000 BeOpen.com no 1.6.1 1.6 2001 CNRI yes (2) 2.1 2.0+1.6.1 2001 PSF no 2.0.1 2.0+1.6.1 2001 PSF yes 2.1.1 2.1+2.0.1 2001 PSF yes 2.1.2 2.1.1 2002 PSF yes 2.1.3 2.1.2 2002 PSF yes 2.2 and above 2.1.1 2001-now PSF yes Footnotes: (1) GPL-compatible doesn't mean that we're distributing Python under the GPL. All Python licenses, unlike the GPL, let you distribute a modified version without making your changes open source. The GPL-compatible licenses make it possible to combine Python with other software that is released under the GPL; the others don't.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL. Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible. B. TERMS AND CONDITIONS FOR ACCESSING OR OTHERWISE USING PYTHON ========== PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2 --- 1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee. 3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Licensee hereby agrees to include in any such work a brief summary of the changes made to Python. 4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement. BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0 ---------- BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1 1. This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software"). 2. Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee. 3. BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 4. BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 5. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 6. This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		law provisions. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between BeOpen and Licensee. This License Agreement does not grant permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at http://www.pythonlabs.com/logos.html may be used according to the permissions granted on that web page. 7. By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement. CNRI LICENSE AGREEMENT FOR PYTHON 1.6.1 ---------- 1. This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 1.6.1 software in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6.1 alone or in any derivative version, provided, however, that CNRI's License Agreement and CNRI's notice of copyright, i.e., "Copyright (c) 1995-2001 Corporation for National Research Initiatives; All Rights Reserved" are retained in Python 1.6.1 alone or in any derivative

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		version prepared by Licensee. Alternately, in lieu of CNRI's License Agreement, Licensee may substitute the following text (omitting the quotes): "Python 1.6.1 is made available subject to the terms and conditions in CNRI's License Agreement. This Agreement together with Python 1.6.1 may be located on the Internet using the following unique, persistent identifier (known as a handle): 1895.22/1013. This Agreement may also be obtained from a proxy server on the Internet using the following URL: http://hdl.handle.net/1895.22/1013". 3. In the event Licensee prepares a derivative work that is based on or incorporates Python 1.6.1 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 1.6.1. 4. CNRI is making Python 1.6.1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 1.6.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 1.6.1, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		7. This License Agreement shall be governed by the federal intellectual property law of the United States, including without limitation the federal copyright law, and, to the extent such U.S. federal law does not apply, by the law of the Commonwealth of Virginia, excluding Virginia's conflict of law provisions. Notwithstanding the foregoing, with regard to derivative works based on Python 1.6.1 that incorporate non-separable material that was previously distributed under the GNU General Public License (GPL), the law of the Commonwealth of Virginia shall govern this License Agreement only as to issues arising under or with respect to Paragraphs 4, 5, and 7 of this License Agreement. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6.1, Licensee agrees to be bound by the terms and conditions of this License Agreement. ACCEPT CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2 ---------- Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved. Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ========== +--- 4th party: wrapt Copyright (c) 2009 Daniel Neighman See Appendix G ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
the original author or authors	springdoc-openapi-ui 1.6.4 springdoc-openapi-ui 1.6.11	========== ========== The Apache License, Version 2.0 for org.springdoc » springdoc-openapi-ui »========== Apache License, version 2.0 - See Appendix E --- --- --- ========== The Apache License, Version 2.0 org.springframework.boot » spring-boot-starter-actuator========== Apache License, version 2.0 - See Appendix E ==========EPL 2.0 License for jakarta.servlet » jakarta.servlet-api » 4.0.4========== Eclipse Public License - v 2.0 ==========GNU License for jakarta.servlet » jakarta.servlet-api »========== Classpath::License Classpath is distributed under the terms of the GNU General Public License with the following clarification and special exception. Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version. As such, it can be used to run, create and distribute a large class of applications and applets. When GNU Classpath is used unmodified as the core class library for a virtual machine, compiler for the java languge, or for a program written in the java programming language it does not affect the licensing for distributing those programs directly.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Classpath::Documentation Redistribution Policy GNU Documentation is unique because of our attitude towards it. We believe the reader should be free to copy and redistribute it, just like our software. Originally, all our documentation was released under a short Copyleft license, or under the GNU General Public License (GPL) itself; in 2001 the Free Documentation License (FDL) was created to address certain needs that were not met by licenses originally designed for software. TOP-LEVEL COPYRIGHT NOTICE for org.springdoc » springdoc-openapi-ui ---------separator--------- TOP-LEVEL LICENSE TEXT for org.springdoc:springdoc-openapi-ui Apache License, version 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springdoc:springdoc-openapi-ui:1.6.4 FOURTH-PARTY DEPENDENCY #2 org.springdoc:springdoc-openapi-webmvc-core:1.6.4 FOURTH-PARTY DEPENDENCY #3 org.springdoc:springdoc-openapi-common:1.6.4 COMMON LICENSE TEXT Same as TEXT mentioned under TOP-LEVEL License Text ---------separator--------- FOURTH-PARTY DEPENDENCY #4 org.springframework.boot:spring-boot-autoconfigure FOURTH-PARTY DEPENDENCY #5 org.springframework:spring-web FOURTH-PARTY DEPENDENCY #6 org.springframework:spring-webmvc Copyright (c) 2012-2021 Pivotal, Inc. COMMON LICENSE TEXT Same as TEXT mentioned under TOP-LEVEL License Text ---------separator--------- FOURTH-PARTY DEPENDENCY #7 io.swagger.core.v3:swagger-annotations FOURTH-PARTY DEPENDENCY #8 io.swagger.core.v3:swagger-models FOURTH-PARTY DEPENDENCY #9 io.swagger.core.v3:swagger-core /**

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Copyright 2017 SmartBear Software * <p> * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * <p> * http://www.apache.org/licenses/LICENSE-2.0 * <p> * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ COMMON LICENSE TEXT Same as TEXT mentioned under TOP-LEVEL License Text ---------separator--------- FOURTH-PARTY DEPENDENCY #10 com.fasterxml.jackson.core:jackson-annotations FOURTH-PARTY DEPENDENCY #11 com.fasterxml.jackson.core:jackson-core FOURTH-PARTY DEPENDENCY #12 com.fasterxml.jackson.core:jackson-databind FOURTH-PARTY DEPENDENCY #13 com.fasterxml.jackson.dataformat:jackson-dataformat-yaml FOURTH-PARTY DEPENDENCY #14 com.fasterxml.jackson.datatype:jackson-datatype-jsr310 FOURTH-PARTY DEPENDENCY #15 com.fasterxml.jackson:jackson-bom Copyright ©2009-2011 FasterXML, LLC NOTICE # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		It is currently developed by a community of developers. ## Licensing Jackson 2.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS(-2.x) file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. Same as TEXT mentioned under TOP-LEVEL License Text ---------separator--------- FOURTH-PARTY DEPENDENCY #18 org.slf4j:slf4j-api Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #18 org.yaml:snakeyaml Copyright (c) 2008-2010 Andrey Somov Same as TEXT mentioned under TOP-LEVEL License Text ---------separator--------- FOURTH-PARTY DEPENDENCY #19 org.webjars:swagger-ui FOURTH-PARTY DEPENDENCY #20 org.webjars:webjars-locator-core Same as TEXT mentioned under TOP-LEVEL License Text --------- Notice ---------- swagger-ui Copyright 2020-2021 SmartBear Software Inc. ---------separator--------- FOURTH-PARTY DEPENDENCY #21 io.github.classgraph:classgraph MIT License See Appendix G ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #22 org.apache.commons:commons-lang3:3.7 Same as TEXT mentioned under TOP-LEVEL License Text --------NOTICE---------- Apache Commons Lang Copyright 2001-2021 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-validation 2.7.4	Top Level Component Copyright: ========== Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== org.springframework.boot:spring-boot-starter-validation: License: Apache License Version 2.0 License: [0] Copyright Notice ========== /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== Reference [0] Apache License, version 2.0 - See Appendix E ---------- NOTICE ---------- Spring Boot Copyright (c) 2012-2021 Pivotal, Inc.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ---------- NOTICE ---------- Spring Framework Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ---------- Fourth party Dependencies: org.springframework.boot:spring-boot-starter: org.springframework.boot:spring-boot: org.springframework:spring-core: org.springframework:spring-jcl: org.springframework:spring-context:jar: org.springframework:spring-aop:jar: org.springframework:spring-beans:jar: org.springframework:spring-expression:jar: org.springframework.boot:spring-boot-autoconfigure: org.springframework.boot:spring-boot-actuator-autoconfigure: org.springframework.boot:spring-boot-actuator: License: Apache License Version 2.0 License: [0] ---------- org.springframework.boot:spring-boot-starter: Copyright Notice ========== ========== /* * Copyright 2012-2022 Pivotal, Inc.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- org.springframework.boot:spring-boot: Copyright Notice ========== /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.springframework:spring-core: Copyright Notice ========== /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- org.springframework:spring-jcl: Copyright Notice ========== /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- org.springframework:spring-context:jar: Copyright Notice ========== ========== /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- org.springframework:spring-aop:jar: Copyright Notice ========== ========== /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- org.springframework:spring-beans:jar: Copyright Notice ========== /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- org.springframework:spring-expression:jar: Copyright Notice ========== /* * Copyright 2012-2022 Pivotal, Inc. *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- org.springframework.boot:spring-boot-autoconfigure: Copyright Notice ========== /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.springframework.boot:spring-boot-actuator-autoconfigure: Copyright Notice ========== /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- org.springframework.boot:spring-boot-actuator: Copyright Notice ========== /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- (separator)---------- logback:logback-core logback:logback-classic Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2015, QOS.ch. All rights reserved. This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. --- Eclipse Public License - v 1.0 See Appendix J --- (separator)---------- org.slf4j:slf4j-api jul-to-slf4j MIT License See Appendix G --- (separator)---------- org.apache.logging.log4j:log4j-api: License: Apache License, Version 2.0 Text of License: [0] Copyright: ========== Apache Log4j API Copyright 1999-2022 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/).

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		--- (separator)---------- org.apache.logging.log4j:log4j-to-slf4j License: Apache License License text: [0] Apache Log4j Copyright 1999-2019 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma --- (separator)---------- spring-boot-starter-logging License: Apache License License text: [0] Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. --- (separator)---------- jakarta.annotation:jakarta.annotation-api: License: Eclipse Public License Version 2.0 + GPL2 with Classpath Exception ========== Reference Eclipse Public License - v 2.0 GNU General Public License, Version 2 (GPL v2) - See Appendix A ---

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		## CLASSPATH EXCEPTION Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License version 2 cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version. ========== Copyright: ========== Text of Copyright Copyright (c) 2012, 2021 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0, which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception, which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Notice: ---------- # Notices for Jakarta Annotations This content is produced and maintained by the Jakarta Annotations project. * Project home: https://projects.eclipse.org/projects/ee4j.ca ## Trademarks Jakarta Annotations is a trademark of the Eclipse Foundation. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/common-annotations-api ## Third-party Content

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		## Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. --- (separator)---------- org.yaml:snakeyaml: License: Apache License Version 2.0 (https://www.apache.org/licenses/LICENSE-2.0) Text of License: [0] Copyright: ========== Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- (separator)---------- org.apache.tomcat.embed:tomcat-embed-el: License: Apache License Version 2.0 Text of License: [0] Copyright: Apache Tomcat

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 1999-2022 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). This software contains code derived from netty-native developed by the Netty project (https://netty.io, https://github.com/netty/netty-tcnative/) and from finagle-native developed at Twitter (https://github.com/twitter/finagle). This software contains code derived from jgroups-kubernetes developed by the JGroups project (http://www.jgroups.org/). Java compilation software for JSP pages is provided by the Eclipse JDT Core Batch Compiler component, which is open source software. The original software and related information is available at https://www.eclipse.org/jdt/core/. org.apache.tomcat.util.json.JSONParser.jj is a public domain javacc grammar for JSON written by Robert Fischer. https://github.com/RobertFischer/json-parser For portions of the Tomcat JNI OpenSSL API and the OpenSSL JSSE integration The org.apache.tomcat.jni and the org.apache.tomcat.net.openssl packages are derivative work originating from the Netty project and the finagle-native project developed at Twitter * Copyright 2014 The Netty Project * Copyright 2014 Twitter For portions of the Tomcat cloud support The org.apache.catalina.tribes.membership.cloud package contains derivative work originating from the jgroups project. https://github.com/jgroups-extras/jgroups-kubernetes Copyright 2002-2018 Red Hat Inc. The original XML Schemas for Java EE Deployment Descriptors: - javaee_5.xsd - javaee_web_services_1_2.xsd - javaee_web_services_client_1_2.xsd

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		- javaee_6.xsd - javaee_web_services_1_3.xsd - javaee_web_services_client_1_3.xsd - jsp_2_2.xsd - web-app_3_0.xsd - web-common_3_0.xsd - web-fragment_3_0.xsd - javaee_7.xsd - javaee_web_services_1_4.xsd - javaee_web_services_client_1_4.xsd - jsp_2_3.xsd - web-app_3_1.xsd - web-common_3_1.xsd - web-fragment_3_1.xsd - javaee_8.xsd - web-app_4_0.xsd - web-common_4_0.xsd - web-fragment_4_0.xsd may be obtained from: http://www.oracle.com/webfolder/technetwork/jsc/xml/ns/javaee/index.html --- (separator)---------- NAME OF DEPENDENCY - org.hibernate.validator:hibernate-validator: License: Apache License Version 2.0 JBoss, Home of Professional Open Source Copyright 2011, Red Hat, Inc. and/or its affiliates, and individual contributors by the @authors tag. See the copyright.txt in the distribution for a full listing of individual contributors. ========== ========== /* * Hibernate Validator, declare and validate application constraints * * License: Apache License, Version 2.0 * See the license.txt file in the root directory or . */ --- (separator)---------- NAME OF DEPENDENCY - jakarta.validation:jakarta.validation-api:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		License: Apache License Version 2.0 Text of License: [0] Copyright Notice ========== ========== /* * Copyright 2012-2022 Red Hat, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Notice: --- # Notices for Eclipse Jakarta Bean Validation This content is produced and maintained by the Eclipse Jakarta Bean Validation project. * Project home: https://projects.eclipse.org/projects/ee4j.bean-validation ## Trademarks Jakarta Bean Validation is a trademark of the Eclipse Foundation. ## Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ## Declared Project Licenses

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This program and the accompanying materials are made available under the terms of the Apache License, Version 2.0 which is available at https://www.apache.org/licenses/LICENSE-2.0. SPDX-License-Identifier: Apache-2.0 ## Source Code The project maintains the following source code repositories: * [The specification repository](https://github.com/eclipse-ee4j/beanvalidation-spec) * [The API repository](https://github.com/eclipse-ee4j/beanvalidation-api) * [The TCK repository](https://github.com/eclipse-ee4j/beanvalidation-tck) ## Third-party Content This project leverages the following third party content. Test dependencies: * [TestNG](https://github.com/cbeust/testng) - Apache License 2.0 * [JCommander](https://github.com/cbeust/jcommander) - Apache License 2.0 * [SnakeYAML](https://bitbucket.org/asomov/snakeyaml/src) - Apache License 2.0 ---------- (separator)---------- NAME OF DEPENDENCY - org.jboss.logging:jboss-logging: License: Apache License Version 2.0 Text of License: [0] Copyright: ========== ========== /* * JBoss, Home of Professional Open Source. * Copyright 2014 Red Hat, Inc., and individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - com.fasterxml:classmate:jar License: Apache License Version 2.0 License: [0] Copyright: ========== ========== Copyright: (C) FasterXML, LLC and Tatu Saloranta Java ClassMate library was originally written by Tatu Saloranta (tatu.saloranta@iki.fi) Other developers who have contributed code are: * Brian Langel

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-cache 2.6.7 spring-boot-starter-cache 2.7.1	Top Level Component Copyright: --- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== org.springframework.boot:spring-boot-starter-cache License : Apache License Version 2.0 Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. License text : [0] in License reference. ---------- NOTICE ---------- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== Fourth-Party Dependencies

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.springframework.boot spring-boot org.springframework.boot spring-boot-autoconfigure org.springframework.boot spring-boot-starter org.springframework.boot spring-boot-starter-logging License : Apache License Version 2.0 [0] Common Copyright: Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Notices: Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== Fourth-Party Dependencies org.springframework spring-aop org.springframework spring-beans org.springframework spring-context org.springframework spring-context-support org.springframework spring-core org.springframework spring-expression org.springframework spring-jcl License : Apache License Version 2.0 [0]

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Common Copyright: Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Notices: Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ========== ========== ========== Fourth-Party Dependencies org.apache.logging.log4j log4j-api org.apache.logging.log4j log4j-to-slf4j License : Apache License Version 2.0 [0] Common Copyright Notice Copyright 1999-2022 The Apache Software Foundation

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Apache Log4j Copyright 1999-2022 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma TimeoutBlockingWaitStrategy.java and parts of Util.java Copyright 2011 LMAX Ltd. ========== Fourth-Party Dependencies ch.qos.logback logback-classic ch.qos.logback logback-core License : Eclipse Public License v1.0 License text : [2] in License reference. Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2017, QOS.ch. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. ========== Fourth-Party Dependencies org.slf4j:slf4j-api MIT License See Appendix G ========== Fourth-Party Dependencies jul-to-slf4j MIT License See Appendix G ========== Fourth-Party Dependencies jakarta.annotation:jakarta.annotation-api License: Eclipse Public License Version 2.0 Copyright: Text of Copyright Copyright (c) 2012, 2021 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0, which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception, which is available at https://www.gnu.org/software/classpath/license.html.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ---------- # Notices for Jakarta Annotations This content is produced and maintained by the Jakarta Annotations project. * Project home: https://projects.eclipse.org/projects/ee4j.ca ## Trademarks Jakarta Annotations is a trademark of the Eclipse Foundation. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/common-annotations-api ## Third-party Content ## Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ========== ========== ========== Fourth-Party Dependencies org.yaml snakeyaml License : Apache License Version 2.0 Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. License text : [0] in License reference. ========== ========== ========== License References are mentioned below. ========== Start License Reference [0] ========== Apache License, version 2.0 - See Appendix E Eclipse Public License - v 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Apache Software Foundation	log4j-layout-template-json 2.17.2	Apache Log4j Copyright 1999-2021 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http:// www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma Apache License, version 2.0 - See Appendix E END OF TERMS AND CONDITIONS APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright 1999-2005 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.
The Apache Software Foundation	HttpComponents Client 5.1.3	---------- Top-level license ---------- Top Level Component: org.apache.httpcomponents.client5:httpclient5:5.1.3 Apache License, version 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The OpenTracing Authors	opentracing-spring-web-starter 4.1.0	********** ********* Copied from LT Public License & Copyright Notices ********* Apache License Apache License, version 2.0 - See Appendix E ========== Copyright 2016-2020 The OpenTracing Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== Dependencies: opentracing-tracerresolver opentracing-spring-tracer-configuration-starter opentracing-spring-web ====== spring-boot-autoconfigure Apache License, version 2.0 - See Appendix E === ========== . . . ---------- Copyright notices ---------- Top Level Component: org.apache.httpcomponents.client5:httpclient5:5.1.3 File: NOTICE.txt ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Apache HttpComponents Client Copyright 1999-2022 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). CopyRight: ---------- /* * ========== * Licensed to the Apache Software Foundation (ASF) under one * or more contributor license agreements. See the NOTICE file * distributed with this work for additional information * regarding copyright ownership. The ASF licenses this file * to you under the Apache License, Version 2.0 (the * "License"); you may not use this file except in compliance * with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, * software distributed under the License is distributed on an * "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY * KIND, either express or implied. See the License for the * specific language governing permissions and limitations * under the License. * ========== * * This software consists of voluntary contributions made by many * individuals on behalf of the Apache Software Foundation. For more * information on the Apache Software Foundation, please see

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* <http://www.apache.org/>. * */ ========== ---------- Fourth-party information ---------- ========== == Package Name: org.apache.httpcomponents.core5:httpcore5:5.1.3 . == License Apache License, version 2.0 - See Appendix E CopyRight: /* * ========== * Licensed to the Apache Software Foundation (ASF) under one * or more contributor license agreements. See the NOTICE file * distributed with this work for additional information * regarding copyright ownership. The ASF licenses this file * to you under the Apache License, Version 2.0 (the * "License"); you may not use this file except in compliance * with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, * software distributed under the License is distributed on an * "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY * KIND, either express or implied. See the License for the * specific language governing permissions and limitations * under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* ========== ========== * * This software consists of voluntary contributions made by many * individuals on behalf of the Apache Software Foundation. For more * information on the Apache Software Foundation, please see * <http://www.apache.org/>. * */ ---------- (separator)---------- == Package: org.apache.httpcomponents.core5:httpcore5-h2:5.1.3 . == License Apache License, version 2.0 - See Appendix E END OF TERMS AND CONDITIONS © 2022 GitHub, Inc. Footer navigation Terms Privacy Security == Copyright Notices . . Notice.txt: Apache HttpComponents Core Copyright 2005-2022 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). CopyRight: /* * ========== ========== * * Licensed to the Apache Software Foundation (ASF) under one * or more contributor license agreements. See the NOTICE file * distributed with this work for additional information

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* regarding copyright ownership. The ASF licenses this file * to you under the Apache License, Version 2.0 (the * "License"); you may not use this file except in compliance * with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, * software distributed under the License is distributed on an * "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY * KIND, either express or implied. See the License for the * specific language governing permissions and limitations * under the License. * ========== * * This software consists of voluntary contributions made by many * individuals on behalf of the Apache Software Foundation. For more * information on the Apache Software Foundation, please see * <http://www.apache.org/>. * */ --- (separator)---------- == Package: org.slf4j:slf4j-api:1.7.25 -> 1.7.36 . == License . . Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland) All rights reserved. See Appendix G == Copyright Notices .

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		. /** * Copyright (c) 2004-2011 QOS.ch * All rights reserved. * See Appendix G * */ --- (separator)---------- == Package: commons-codec:commons-codec:1.15 . == License Apache License, version 2.0 - See Appendix E END OF TERMS AND CONDITIONS APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright [yyyy] [name of copyright owner] Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See the License for the specific language governing permissions and limitations under the License. == Copyright Notices . . Notice.txt: Apache Commons Codec Copyright 2002-2022 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). src/test/org/apache/commons/codec/language/DoubleMetaphoneTest.java contains test data from http://aspell.net/test/orig/batch0.tab. Copyright (C) 2002 Kevin Atkinson (kevina@gnu.org) ========== ========== The content of package org.apache.commons.codec.language.bm has been translated from the original php source code available at http://stevemorse.org/phoneticinfo.htm with permission from the original authors. Original source copyright: Copyright (c) 2008 Alexander Beider & Stephen P. Morse. CopyRight: /* * Licensed to the Apache Software Foundation (ASF) under one or more * contributor license agreements. See the NOTICE file distributed with * this work for additional information regarding copyright ownership. * The ASF licenses this file to You under the Apache License, Version 2.0 * (the "License"); you may not use this file except in compliance with * the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- (separator)----------
The Legion Of The Bouncy Castle Inc.	bcprov-ext-jdk15on 1.69	`Copyright (c) 2000 - 2021 The Legion of the Bouncy Castle Inc. (https://www.bouncycastle.org)` See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Microsoft	TypeScript 4.6.4	typescript (Apache-2.0) /*! ********** Copyright (c) Microsoft Corporation. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 THIS CODE IS PROVIDED ON AN *AS IS* BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OR CONDITIONS OF TITLE, FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABLITY OR NON-INFRINGEMENT. See the Apache Version 2.0 License for specific language governing permissions and limitations under the License. ********** */ Apache License, version 2.0 - See Appendix E --------- DOM Copyright 2018 WHATWG (Apple, Google, Mozilla, Microsoft). This work is licensed under a Creative Commons Attribution 4.0 International License: Attribution 4.0 International ========== Creative Commons Corporation ("Creative Commons") is not a law firm and does not provide legal services or legal advice. Distribution of Creative Commons public licenses does not create a lawyer-client or other relationship. Creative Commons makes its licenses and related information available on an "as-is" basis. Creative Commons gives no warranties regarding its licenses, any material licensed under their terms and conditions, or any related information. Creative Commons disclaims all liability for damages resulting from their use to the fullest extent possible. Using Creative Commons Public Licenses Creative Commons public licenses provide a standard set of terms and conditions that creators and other rights holders may use to share original works of authorship and other material subject to copyright and certain other rights specified in the public license below. The following considerations are for informational purposes only, are

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		not exhaustive, and do not form part of our licenses. Considerations for licensors: Our public licenses are intended for use by those authorized to give the public permission to use material in ways otherwise restricted by copyright and certain other rights. Our licenses are irrevocable. Licensors should read and understand the terms and conditions of the license they choose before applying it. Licensors should also secure all rights necessary before applying our licenses so that the public can reuse the material as expected. Licensors should clearly mark any material not subject to the license. This includes other CC- licensed material, or material used under an exception or limitation to copyright. More considerations for licensors: wiki.creativecommons.org/Considerations_for_licensors Considerations for the public: By using one of our public licenses, a licensor grants the public permission to use the licensed material under specified terms and conditions. If the licensor's permission is not necessary for any reason--for example, because of any applicable exception or limitation to copyright--then that use is not regulated by the license. Our licenses grant only permissions under copyright and certain other rights that a licensor has authority to grant. Use of the licensed material may still be restricted for other reasons, including because others have copyright or other rights in the material. A licensor may make special requests, such as asking that all changes be marked or described. Although not required by our licenses, you are encouraged to respect those requests where reasonable. More_considerations for the public: wiki.creativecommons.org/Considerations_for_licensees ========== ========== Creative Commons Attribution 4.0 International Public License By exercising the Licensed Rights (defined below), You accept and agree to be bound by the terms and conditions of this Creative Commons Attribution 4.0 International Public License ("Public License"). To the extent this Public License may be interpreted as a contract, You are granted the Licensed Rights in consideration of Your acceptance of these terms and conditions, and the Licensor grants You such rights in consideration of benefits the Licensor receives from making the Licensed Material available under these terms and conditions. Section 1 -- Definitions. a. Adapted Material means material subject to Copyright and Similar Rights that is derived from or based upon the Licensed Material and in which the Licensed Material is translated, altered, arranged, transformed, or otherwise modified in a manner requiring permission under the Copyright and Similar Rights held by the Licensor. For purposes of this Public License, where the Licensed Material is a musical work, performance, or sound recording, Adapted Material is always produced

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		where the Licensed Material is synched in timed relation with a moving image. b. Adapter's License means the license You apply to Your Copyright and Similar Rights in Your contributions to Adapted Material in accordance with the terms and conditions of this Public License. c. Copyright and Similar Rights means copyright and/or similar rights closely related to copyright including, without limitation, performance, broadcast, sound recording, and Sui Generis Database Rights, without regard to how the rights are labeled or categorized. For purposes of this Public License, the rights specified in Section 2(b)(1)-(2) are not Copyright and Similar Rights. d. Effective Technological Measures means those measures that, in the absence of proper authority, may not be circumvented under laws fulfilling obligations under Article 11 of the WIPO Copyright Treaty adopted on December 20, 1996, and/or similar international agreements. e. Exceptions and Limitations means fair use, fair dealing, and/or any other exception or limitation to Copyright and Similar Rights that applies to Your use of the Licensed Material. f. Licensed Material means the artistic or literary work, database, or other material to which the Licensor applied this Public License. g. Licensed Rights means the rights granted to You subject to the terms and conditions of this Public License, which are limited to all Copyright and Similar Rights that apply to Your use of the Licensed Material and that the Licensor has authority to license. h. Licensor means the individual(s) or entity(ies) granting rights under this Public License. i. Share means to provide material to the public by any means or process that requires permission under the Licensed Rights, such as reproduction, public display, public performance, distribution, dissemination, communication, or importation, and to make material available to the public including in ways that members of the public may access the material from a place and at a time individually chosen by them. j. Sui Generis Database Rights means rights other than copyright resulting from Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, as amended and/or succeeded, as well as other essentially equivalent rights anywhere in the world. k. You means the individual or entity exercising the Licensed Rights under this Public License. Your has a corresponding meaning. Section 2 -- Scope. a. License grant. 1. Subject to the terms and conditions of this Public License, the Licensor hereby grants You a worldwide, royalty-free, non-sublicensable, non-exclusive, irrevocable license to exercise the Licensed Rights in the Licensed Material to: a. reproduce and Share the Licensed Material, in whole or in part; and b. produce, reproduce, and Share Adapted Material. 2. Exceptions and Limitations. For the avoidance of doubt, where Exceptions and Limitations apply to Your use, this Public License does not apply,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		and You do not need to comply with its terms and conditions. 3. Term. The term of this Public License is specified in Section 6(a). 4. Media and formats; technical modifications allowed. The Licensor authorizes You to exercise the Licensed Rights in all media and formats whether now known or hereafter created, and to make technical modifications necessary to do so. The Licensor waives and/or agrees not to assert any right or authority to forbid You from making technical modifications necessary to exercise the Licensed Rights, including technical modifications necessary to circumvent Effective Technological Measures. For purposes of this Public License, simply making modifications authorized by this Section 2(a) (4) never produces Adapted Material. 5. Downstream recipients. a. Offer from the Licensor -- Licensed Material. Every recipient of the Licensed Material automatically receives an offer from the Licensor to exercise the Licensed Rights under the terms and conditions of this Public License. b. No downstream restrictions. You may not offer or impose any additional or different terms or conditions on, or apply any Effective Technological Measures to, the Licensed Material if doing so restricts exercise of the Licensed Rights by any recipient of the Licensed Material. 6. No endorsement. Nothing in this Public License constitutes or may be construed as permission to assert or imply that You are, or that Your use of the Licensed Material is, connected with, or sponsored, endorsed, or granted official status by, the Licensor or others designated to receive attribution as provided in Section 3(a)(1)(A)(i). b. Other rights. 1. Moral rights, such as the right of integrity, are not licensed under this Public License, nor are publicity, privacy, and/or other similar personality rights; however, to the extent possible, the Licensor waives and/or agrees not to assert any such rights held by the Licensor to the limited extent necessary to allow You to exercise the Licensed Rights, but not otherwise. 2. Patent and trademark rights are not licensed under this Public License. 3. To the extent possible, the Licensor waives any right to collect royalties from You for the exercise of the Licensed Rights, whether directly or through a collecting society under any voluntary or waivable statutory or compulsory licensing scheme. In all other cases the Licensor expressly reserves any right to collect such royalties. Section 3 -- License Conditions. Your exercise of the Licensed Rights is expressly made subject to the following conditions. a. Attribution. 1. If You Share the Licensed Material (including in modified form), You must: a. retain the following if it is supplied by the Licensor with the Licensed Material: i. identification of the creator(s) of the Licensed Material and any others designated to receive attribution, in any reasonable manner requested by the Licensor (including by pseudonym if designated); ii. a copyright notice; iii. a

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		notice that refers to this Public License; iv. a notice that refers to the disclaimer of warranties; v. a URI or hyperlink to the Licensed Material to the extent reasonably practicable; b. indicate if You modified the Licensed Material and retain an indication of any previous modifications; and c. indicate the Licensed Material is licensed under this Public License, and include the text of, or the URI or hyperlink to, this Public License. 2. You may satisfy the conditions in Section 3(a)(1) in any reasonable manner based on the medium, means, and context in which You Share the Licensed Material. For example, it may be reasonable to satisfy the conditions by providing a URI or hyperlink to a resource that includes the required information. 3. If requested by the Licensor, You must remove any of the information required by Section 3(a)(1)(A) to the extent reasonably practicable. 4. If You Share Adapted Material You produce, the Adapter's License You apply must not prevent recipients of the Adapted Material from complying with this Public License. Section 4 -- Sui Generis Database Rights. Where the Licensed Rights include Sui Generis Database Rights that apply to Your use of the Licensed Material: a. for the avoidance of doubt, Section 2(a)(1) grants You the right to extract, reuse, reproduce, and Share all or a substantial portion of the contents of the database; b. if You include all or a substantial portion of the database contents in a database in which You have Sui Generis Database Rights, then the database in which You have Sui Generis Database Rights (but not its individual contents) is Adapted Material; and c. You must comply with the conditions in Section 3(a) if You Share all or a substantial portion of the contents of the database. For the avoidance of doubt, this Section 4 supplements and does not replace Your obligations under this Public License where the Licensed Rights include other Copyright and Similar Rights. Section 5 -- Disclaimer of Warranties and Limitation of Liability. a. UNLESS OTHERWISE SEPARATELY UNDERTAKEN BY THE LICENSOR, TO THE EXTENT POSSIBLE, THE LICENSOR OFFERS THE LICENSED MATERIAL AS-IS AND AS-AVAILABLE, AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE LICENSED MATERIAL, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHER. THIS INCLUDES, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OR ABSENCE OF ERRORS, WHETHER OR NOT KNOWN OR DISCOVERABLE. WHERE DISCLAIMERS OF WARRANTIES ARE NOT ALLOWED IN FULL OR IN PART, THIS DISCLAIMER MAY NOT APPLY TO YOU. b. TO THE EXTENT POSSIBLE, IN NO EVENT WILL THE

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY (INCLUDING, WITHOUT LIMITATION, NEGLIGENCE) OR OTHERWISE FOR ANY DIRECT, SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE, EXEMPLARY, OR OTHER LOSSES, COSTS, EXPENSES, OR DAMAGES ARISING OUT OF THIS PUBLIC LICENSE OR USE OF THE LICENSED MATERIAL, EVEN IF THE LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSSES, COSTS, EXPENSES, OR DAMAGES. WHERE A LIMITATION OF LIABILITY IS NOT ALLOWED IN FULL OR IN PART, THIS LIMITATION MAY NOT APPLY TO YOU. c. The disclaimer of warranties and limitation of liability provided above shall be interpreted in a manner that, to the extent possible, most closely approximates an absolute disclaimer and waiver of all liability. Section 6 -- Term and Termination. a. This Public License applies for the term of the Copyright and Similar Rights licensed here. However, if You fail to comply with this Public License, then Your rights under this Public License terminate automatically. b. Where Your right to use the Licensed Material has terminated under Section 6(a), it reinstates: 1. automatically as of the date the violation is cured, provided it is cured within 30 days of Your discovery of the violation; or 2. upon express reinstatement by the Licensor. For the avoidance of doubt, this Section 6(b) does not affect any right the Licensor may have to seek remedies for Your violations of this Public License. c. For the avoidance of doubt, the Licensor may also offer the Licensed Material under separate terms or conditions or stop distributing the Licensed Material at any time; however, doing so will not terminate this Public License. d. Sections 1, 5, 6, 7, and 8 survive termination of this Public License. Section 7 -- Other Terms and Conditions. a. The Licensor shall not be bound by any additional or different terms or conditions communicated by You unless expressly agreed. b. Any arrangements, understandings, or agreements regarding the Licensed Material not stated herein are separate from and independent of the terms and conditions of this Public License. Section 8 -- Interpretation. a. For the avoidance of doubt, this Public License does not, and shall not be interpreted to, reduce, limit, restrict, or impose conditions on any use of the Licensed Material that could lawfully be made without permission under this Public License. b. To the extent possible, if any provision of this Public License is deemed unenforceable, it shall be automatically reformed to the minimum extent necessary to make it enforceable. If the provision cannot be reformed, it shall be severed from this Public License without affecting the enforceability of the remaining terms and conditions. c. No term or condition of this Public License will be waived and no failure to comply consented to unless expressly agreed to by the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Licensor. d. Nothing in this Public License constitutes or may be interpreted as a limitation upon, or waiver of, any privileges and immunities that apply to the Licensor or You, including from the legal processes of any jurisdiction or authority. ========== ========== Creative Commons is not a party to its public licenses. Notwithstanding, Creative Commons may elect to apply one of its public licenses to material it publishes and in those instances will be considered the "Licensor." Except for the limited purpose of indicating that material is shared under a Creative Commons public license or as otherwise permitted by the Creative Commons policies published at creativecommons.org/policies, Creative Commons does not authorize the use of the trademark "Creative Commons" or any other trademark or logo of Creative Commons without its prior written consent including, without limitation, in connection with any unauthorized modifications to any of its public licenses or any other arrangements, understandings, or agreements concerning use of licensed material. For the avoidance of doubt, this paragraph does not form part of the public licenses. Creative Commons may be contacted at creativecommons.org. ---------- ----------Web Background Synchronization---------- Web Background Synchronization Specification Portions of spec by W3C W3C Community Final Specification Agreement To secure commitments from participants for the full text of a Community or Business Group Report, the group may call for voluntary commitments to the following terms; a "summary" is available. See also the related "W3C Community Contributor License Agreement". 1. The Purpose of this Agreement. This Agreement sets forth the terms under which I make certain copyright and patent rights available to you for your implementation of the Specification. Any other capitalized terms not specifically defined herein have the same meaning as those terms have in the "W3C Patent Policy", and if not defined there, in the "W3C Process Document". 2. Copyrights. 2.1. Copyright Grant. I grant to you a perpetual (for the duration of the applicable copyright), worldwide, non-exclusive, no-charge, royalty-free, copyright license, without any obligation for accounting to me, to reproduce, prepare derivative works of, publicly display,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		publicly perform, sublicense, distribute, and implement the Specification to the full extent of my copyright interest in the Specification. 2.2. Attribution. As a condition of the copyright grant, you must include an attribution to the Specification in any derivative work you make based on the Specification. That attribution must include, at minimum, the Specification name and version number. 3. Patents. 3.1. Patent Licensing Commitment. I agree to license my Essential Claims under the W3C Community RF Licensing Requirements. This requirement includes Essential Claims that I own and any that I have the right to license without obligation of payment or other consideration to an unrelated third party. W3C Community RF Licensing Requirements obligations made concerning the Specification and described in this policy are binding on me for the life of the patents in question and encumber the patents containing Essential Claims, regardless of changes in participation status or W3C Membership. I also agree to license my Essential Claims under the W3C Community RF Licensing Requirements in derivative works of the Specification so long as all normative portions of the Specification are maintained and that this licensing commitment does not extend to any portion of the derivative work that was not included in the Specification. 3.2. Optional, Additional Patent Grant. In addition to the provisions of Section 3.1, I may also, at my option, make certain intellectual property rights infringed by implementations of the Specification, including Essential Claims, available by providing those terms via the W3C Web site. 4. No Other Rights. Except as specifically set forth in this Agreement, no other express or implied patent, trademark, copyright, or other property rights are granted under this Agreement, including by implication, waiver, or estoppel. 5. Antitrust Compliance. I acknowledge that I may compete with other participants, that I am under no obligation to implement the Specification, that each participant is free to develop competing technologies and standards, and that each party is free to license its patent rights to third parties, including for the purpose of enabling competing technologies and standards. 6. Non-Circumvention. I agree that I will not intentionally take or willfully assist any third party to take any action for the purpose of circumventing my obligations under this Agreement. 7. Transition to W3C Recommendation Track. The Specification developed by the Project may transition to the W3C Recommendation Track. The W3C Team is responsible for notifying me that a Corresponding Working Group has been chartered. I have no obligation

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		to join the Corresponding Working Group. If the Specification developed by the Project transitions to the W3C Recommendation Track, the following terms apply: 7.1. If I join the Corresponding Working Group. If I join the Corresponding Working Group, I will be subject to all W3C rules, obligations, licensing commitments, and policies that govern that Corresponding Working Group. 7.2. If I Do Not Join the Corresponding Working Group. 7.2.1. Licensing Obligations to Resulting Specification. If I do not join the Corresponding Working Group, I agree to offer patent licenses according to the W3C Royalty-Free licensing requirements described in Section 5 of the W3C Patent Policy for the portions of the Specification included in the resulting Recommendation. This licensing commitment does not extend to any portion of an implementation of the Recommendation that was not included in the Specification. This licensing commitment may not be revoked but may be modified through the exclusion process defined in Section 4 of the W3C Patent Policy. I am not required to join the Corresponding Working Group to exclude patents from the W3C Royalty-Free licensing commitment, but must otherwise follow the normal exclusion procedures defined by the W3C Patent Policy. The W3C Team will notify me of any Call for Exclusion in the Corresponding Working Group as set forth in Section 4.5 of the W3C Patent Policy. 7.2.2. No Disclosure Obligation. If I do not join the Corresponding Working Group, I have no patent disclosure obligations outside of those set forth in Section 6 of the W3C Patent Policy. 8. Conflict of Interest. I will disclose significant relationships when those relationships might reasonably be perceived as creating a conflict of interest with my role. I will notify W3C of any change in my affiliation using W3C-provided mechanisms. 9. Representations, Warranties and Disclaimers. I represent and warrant that I am legally entitled to grant the rights and promises set forth in this Agreement. IN ALL OTHER RESPECTS THE SPECIFICATION IS PROVIDED AS IS. The entire risk as to implementing or otherwise using the Specification is assumed by the implementer and user. Except as stated herein, I expressly disclaim any warranties (express, implied, or otherwise), including implied warranties of merchantability, non-infringement, fitness for a particular purpose, or title, related to the Specification. IN NO EVENT WILL ANY PARTY BE LIABLE TO ANY OTHER PARTY FOR LOST PROFITS OR ANY FORM OF INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER FROM ANY CAUSES OF ACTION OF ANY KIND WITH RESPECT TO THIS AGREEMENT, WHETHER BASED ON BREACH OF CONTRACT, TORT (INCLUDING

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		NEGLIGENCE), OR OTHERWISE, AND WHETHER OR NOT THE OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. All of my obligations under Section 3 regarding the transfer, successors in interest, or assignment of Granted Claims will be satisfied if I notify the transferee or assignee of any patent that I know contains Granted Claims of the obligations under Section 3. Nothing in this Agreement requires me to undertake a patent search. 10. Definitions. 10.1. Agreement. Agreement means this W3C Community Final Specification Agreement. 10.2. Corresponding Working Group. Corresponding Working Group is a W3C Working Group that is chartered to develop a Recommendation, as defined in the W3C Process Document, that takes the Specification as an input. 10.3. Essential Claims. Essential Claims shall mean all claims in any patent or patent application in any jurisdiction in the world that would necessarily be infringed by implementation of the Specification. A claim is necessarily infringed hereunder only when it is not possible to avoid infringing it because there is no non-infringing alternative for implementing the normative portions of the Specification. Existence of a non-infringing alternative shall be judged based on the state of the art at the time of the publication of the Specification. The following are expressly excluded from and shall not be deemed to constitute Essential Claims: 10.3.1. any claims other than as set forth above even if contained in the same patent as Essential Claims; and 10.3.2. claims which would be infringed only by: portions of an implementation that are not specified in the normative portions of the Specification, or enabling technologies that may be necessary to make or use any product or portion thereof that complies with the Specification and are not themselves expressly set forth in the Specification (e.g., semiconductor manufacturing technology, compiler technology, object-oriented technology, basic operating system technology, and the like); or the implementation of technology developed elsewhere and merely incorporated by reference in the body of the Specification. 10.3.3. design patents and design registrations. For purposes of this definition, the normative portions of the Specification shall be deemed to include only architectural and interoperability requirements. Optional features in the RFC 2119 sense are considered normative unless they are specifically identified as informative. Implementation examples or any other

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		material that merely illustrate the requirements of the Specification are informative, rather than normative. 10.4. I, Me, or My. I, me, or my refers to the signatory. 10.5 Project. Project means the W3C Community Group or Business Group for which I executed this Agreement. 10.6. Specification. Specification means the Specification identified by the Project as the target of this agreement in a call for Final Specification Commitments. W3C shall provide the authoritative mechanisms for the identification of this Specification. 10.7. W3C Community RF Licensing Requirements. W3C Community RF Licensing Requirements license shall mean a non-assignable, non-sublicensable license to make, have made, use, sell, have sold, offer to sell, import, and distribute and dispose of implementations of the Specification that: 10.7.1. shall be available to all, worldwide, whether or not they are W3C Members; 10.7.2. shall extend to all Essential Claims owned or controlled by me; 10.7.3. may be limited to implementations of the Specification, and to what is required by the Specification; 10.7.4. may be conditioned on a grant of a reciprocal RF license (as defined in this policy) to all Essential Claims owned or controlled by the licensee. A reciprocal license may be required to be available to all, and a reciprocal license may itself be conditioned on a further reciprocal license from all. 10.7.5. may not be conditioned on payment of royalties, fees or other consideration; 10.7.6. may be suspended with respect to any licensee when licensor issued by licensee for infringement of claims essential to implement the Specification or any W3C Recommendation; 10.7.7. may not impose any further conditions or restrictions on the use of any technology, intellectual property rights, or other restrictions on behavior of the licensee, but may include reasonable, customary terms relating to operation or maintenance of the license relationship such as the following: choice of law and dispute resolution; 10.7.8. shall not be considered accepted by an implementer who manifests an intent not to accept the terms of the W3C Community RF Licensing Requirements license as offered by the licensor. 10.7.9. The RF license conforming to the requirements in this policy shall be made available by the licensor as long as the Specification is in effect. The term of such license shall be for the life of the patents in question. I am encouraged to provide a contact from which licensing information can be obtained and other relevant

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		licensing information. Any such information will be made publicly available. 10.8. You or Your. You, you, or your means any person or entity who exercises copyright or patent rights granted under this Agreement, and any person that person or entity controls. --- ---------- WebGL ---------- Copyright (c) 2018 The Khronos Group Inc. See Appendix G THE MATERIALS ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE MATERIALS OR THE USE OR OTHER DEALINGS IN THE MATERIALS. --- ---------- End of ThirdPartyNotices ---------- */
Opentracing.Io	opentracing-javascript 0.14.7	Apache License, version 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Node.js Foundation	Node.js 16.14.0-4.module+el8.6.0+20672+19f3909b	Node.js is licensed for use as follows: """ Copyright Node.js contributors. All rights reserved. See Appendix G """ This license applies to parts of Node.js originating from the https://github.com/joyent/node repository: """ Copyright Joyent, Inc. and other Node contributors. All rights reserved. See Appendix G """ The Node.js license applies to all parts of Node.js that are not externally maintained libraries. The externally maintained libraries used by Node.js are: - Acorn, located at deps/acorn, is licensed as follows: """ MIT License (MIT) See Appendix G - cjs-module-lexer, located at deps/cjs-module-lexer, is licensed as follows: """ MIT License See Appendix G Copyright (C) 2018-2020 Guy Bedford MIT License (MIT) See Appendix G """ - libuv, located at deps/uv, is licensed as follows: """ libuv is licensed for use as follows: ==== Copyright (c) 2015-present libuv project contributors. MIT License (MIT) See Appendix G ==== This license applies to parts of libuv originating from the https://github.com/joyent/libuv repository: ====

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright Joyent, Inc. and other Node contributors. All rights reserved. MIT License (MIT) See Appendix G ==== This license applies to all parts of libuv that are not externally maintained libraries. The externally maintained libraries used by libuv are: - tree.h (from FreeBSD), copyright Niels Provos. Two clause BSD license. - inet_pton and inet_ntop implementations, contained in src/inet.c, are copyright the Internet Systems Consortium, Inc., and licensed under the ISC license. - stdint-msvc2008.h (from msinttypes), copyright Alexander Chemeris. Three clause BSD license. - pthread-fixes.c, copyright Google Inc. and Sony Mobile Communications AB. Three clause BSD license. - android-ifaddrs.h, android-ifaddrs.c, copyright Berkeley Software Design Inc, Kenneth MacKay and Emergya (Cloud4all, FP7/2007-2013, grant agreement nÂ° 289016). Three clause BSD license. """ - llhttp, located at deps/llhttp, is licensed as follows: """ This software is licensed under the MIT License. Copyright Fedor Indutny, 2018. MIT License (MIT) See Appendix G """ - Punycode.js, located at lib/punycode.js, is licensed as follows: """ Copyright Mathias Bynens <https://mathiasbynens.be/> MIT License (MIT) See Appendix G """ - V8, located at deps/v8, is licensed as follows:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		"""" This license applies to all parts of V8 that are not externally maintained libraries. The externally maintained libraries used by V8 are: - PCRE test suite, located in test/mjsunit/third_party/regexp-pcre/regexp-pcre.js. This is based on the test suite from PCRE-7.3, which is copyrighted by the University of Cambridge and Google, Inc. The copyright notice and license are embedded in regexp-pcre.js. - Layout tests, located in test/mjsunit/third_party/object-keys. These are based on layout tests from webkit.org which are copyrighted by Apple Computer, Inc. and released under a 3-clause BSD license. - Strongtalk assembler, the basis of the files assembler-arm-inl.h, assembler-arm.cc, assembler-arm.h, assembler-ia32-inl.h, assembler-ia32.cc, assembler-ia32.h, assembler-x64-inl.h, assembler-x64.cc, assembler-x64.h, assembler-mips-inl.h, assembler-mips.cc, assembler-mips.h, assembler.cc and assembler.h. This code is copyrighted by Sun Microsystems Inc. and released under a 3-clause BSD license. - Valgrind client API header, located at src/third_party/valgrind/valgrind.h This is released under the BSD license. - The Wasm C/C++ API headers, located at third_party/wasm-api/wasm.{h,hh} This is released under the Apache license. The API's upstream prototype implementation also formed the basis of V8's implementation in src/wasm/c-api.cc. These libraries have their own licenses; we recommend you read them, as their terms may differ from the terms below.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Further license information can be found in LICENSE files located in sub-directories. Copyright 2014, the V8 project authors. All rights reserved. See Appendix M """ - SipHash, located at deps/v8/src/third_party/siphash, is licensed as follows: """ SipHash reference C implementation Copyright (c) 2016 Jean-Philippe Aumasson <jeanphilippe.aumasson@gmail.com> To the extent possible under law, the author(s) have dedicated all copyright and related and neighboring rights to this software to the public domain worldwide. This software is distributed without any warranty. """ - npm, located at deps/npm, is licensed as follows: """ The npm application Copyright (c) npm, Inc. and Contributors Licensed on the terms of The Artistic License 2.0 Node package dependencies of the npm application Copyright (c) their respective copyright owners Licensed on their respective license terms The npm public registry at https://registry.npmjs.org and the npm website at https://www.npmjs.com Operated by npm, Inc. Use governed by terms published on https://www.npmjs.com "Node.js" Trademark Joyent, Inc., https://joyent.com Neither npm nor npm, Inc. are affiliated with Joyent, Inc. The Node.js application Project of Node Foundation, https://nodejs.org The npm Logo Copyright (c) Mathias Pettersson and Brian Hammond "Gubblebum Blocky" typeface Copyright (c) Tjarda Koster, https://jelloween.deviantart.com

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Used with permission -------- The Artistic License 2.0 -------- """ - GYP, located at tools/gyp, is licensed as follows: """ Copyright (c) 2020 Node.js contributors. All rights reserved. Copyright (c) 2009 Google Inc. All rights reserved. See Appendix M """ - inspector_protocol, located at tools/inspector_protocol, is licensed as follows: """ // Copyright 2016 The Chromium Authors. All rights reserved. // See Appendix M """ - jinja2, located at tools/inspector_protocol/jinja2, is licensed as follows: """ Copyright (c) 2009 by the Jinja Team, see AUTHORS for more details. Some rights reserved. See Appendix M """ - markupsafe, located at tools/inspector_protocol/markupsafe, is licensed as follows: """ Copyright (c) 2010 by Armin Ronacher and contributors. See AUTHORS for more details. Some rights reserved. Redistribution and use in source and binary forms of the software as well as documentation, with or without modification, are permitted provided that the following conditions are met: * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. * The names of the contributors may not be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE AND DOCUMENTATION IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE AND DOCUMENTATION, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. """ - cpplint.py, located at tools/cpplint.py, is licensed as follows: """ Copyright (c) 2009 Google Inc. All rights reserved. Redistribution and use in source and binary forms, with or without """ - ESLint, located at tools/node_modules/eslint, is licensed as follows: """ Copyright JS Foundation and other contributors, https://js.foundation

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See Appendix G """ - Babel, located at tools/node_modules/@babel, is licensed as follows: """ MIT License (MIT) See Appendix G """ - gtest, located at deps/googletest, is licensed as follows: """ Copyright 2008, Google Inc. All rights reserved. See Appendix M """ - large_pages, located at src/large_pages, is licensed as follows: """ Copyright (C) 2018 Intel Corporation See Appendix G """ - caja, located at lib/internal/freeze_intrinsics.js, is licensed as follows: """ Adapted from SES/Caja - Copyright (C) 2011 Google Inc. Copyright (C) 2018 Agoric Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. """

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		- brotli, located at deps/brotli, is licensed as follows: """ Copyright (c) 2009, 2010, 2013-2016 by the Brotli Authors. See Appendix G """ - HdrHistogram, located at deps/histogram, is licensed as follows: """ The code in this repository code was Written by Gil Tene, Michael Barker, and Matt Warren, and released to the public domain, as explained at http://creativecommons.org/publicdomain/zero/1.0/ For users of this code who wish to consume it under the "BSD" license rather than under the public domain or CC0 contribution text mentioned above, the code found under this directory is *also* provided under the following license (commonly referred to as the BSD 2-Clause License). This license does not detract from the above stated release of the code into the public domain, and simply represents an additional license granted by the Author. ---------- -- ** Beginning of "BSD 2-Clause License" text. ** Copyright (c) 2012, 2013, 2014 Gil Tene Copyright (c) 2014 Michael Barker Copyright (c) 2014 Matt Warren All rights reserved. See Appendix M """ - highlight.js, located at doc/api_assets/highlight.pack.js, is licensed as follows: """ BSD 3-Clause License Copyright (c) 2006, Ivan Sagalaev. All rights reserved. See Appendix M """

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		- node-heapdump, located at src/heap_utils.cc, is licensed as follows: """ ISC License Copyright (c) 2012, Ben Noordhuis <info@bnoordhuis.nl> Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. === src/compat.h src/compat-inl.h === ISC License Copyright (c) 2014, StrongLoop Inc. Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. """ - rimraf, located at lib/internal/fs/rimraf.js, is licensed as follows: """ The ISC License Copyright (c) Isaac Z. Schlueter and Contributors Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. """ - uvwasi, located at deps/uvwasi, is licensed as follows: """ MIT License See Appendix G """ - node-fs-extra, located at lib/internal/fs/cp, is licensed as follows: """ (The MIT License) See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Square, Inc.	okhttp-logging-interceptor 4.9.3	Top level LT: ---------- License[1] Copyright 2019 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Apache License, version 2.0 - See Appendix E 4th party dependencies okio License ---------- "Apache 2.0 (see above)" ---------- kotlin-stdlib Copyright 2010-2018 JetBrains s.r.o. and Kotlin Programming Language contributors. License ---------- "Apache 2.0 (see above)" ---------- com.squareup.okhttp3:logging-interceptor : Apache License : License[1] ---------- com.squareup.okhttp3:logging-interceptor COPYRIGHT Copyright 2022 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Dependencies: com.squareup.okhttp3:okhttp : Apache License : License[1] com.squareup.okio:okio : Apache License : License[1] org.jetbrains.kotlin:kotlin-stdlib-common : Apache License : License[1] org.jetbrains.kotlin:kotlin-stdlib: Apache License : License[1] org.jetbrains:annotations : Apache License : License[1] org.jetbrains.kotlin:kotlin-stdlib-jdk8 : Apache License : License[1] org.jetbrains.kotlin:kotlin-stdlib-jdk7 : Apache License : License[1] --- com.squareup.okhttp3:okhttp COPYRIGHT Copyright 2022 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Notice:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- Note that PublicSuffixDatabase.gz is compiled from The Public Suffix List: https://publicsuffix.org/list/public_suffix_list.dat It is subject to the terms of the Mozilla Public License, v. 2.0: https://mozilla.org/MPL/2.0/ ---------- com.squareup.okio:okio:jar COPYRIGHT Copyright 2022 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- org.jetbrains.kotlin:kotlin-stdlib-common COPYRIGHT /* * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== == NOTICE file corresponding to the section 4 d of == == the Apache License, Version 2.0, == == in this case for the Kotlin Compiler distribution. == ========== ========== Kotlin Compiler Copyright 2010-2020 JetBrains s.r.o and respective authors and developers --- org.jetbrains.kotlin:kotlin-stdlib COPYRIGHT /* * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== == NOTICE file corresponding to the section 4 d of == == the Apache License, Version 2.0, == == in this case for the Kotlin Compiler distribution. == ========== ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Kotlin Compiler Copyright 2010-2020 JetBrains s.r.o and respective authors and developers --- org.jetbrains:annotations COPYRIGHT /* * Copyright 2000-2021 JetBrains s.r.o. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- org.jetbrains.kotlin:kotlin-stdlib-jdk8 COPYRIGHT /* * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== == NOTICE file corresponding to the section 4 d of == == the Apache License, Version 2.0, == == in this case for the Kotlin Compiler distribution. == ========== ========== Kotlin Compiler Copyright 2010-2020 JetBrains s.r.o and respective authors and developers --- org.jetbrains.kotlin:kotlin-stdlib-jdk7 COPYRIGHT /* * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== == NOTICE file corresponding to the section 4 d of == == the Apache License, Version 2.0, == == in this case for the Kotlin Compiler distribution. == ========== ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Kotlin Compiler Copyright 2010-2020 JetBrains s.r.o and respective authors and developers ---------- Mozilla Public License See Appendix R

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
James D Bloom	mockserver-netty 5.13.2	=== ========== Public License Template ========== === This template is provided to help you identify and sort all information === required for the Public Licenses & Copyright Notices field. You do not === need to use or keep this template in place, as long as all details are === provided and organized in such a way that D&E Legal can understand what === belongs where. === === The template is sorted into three sections: copyright notices for the === TOP-LEVEL component, the license for the top-level component, and the === same information for all fourth-party dependencies. If you are not sure === about the difference between top-level and fourth-party dependencies, === please review the section on Fourth-Party Dependencies in the === Corporate Architecture Third-Party Approval FAQ at === https://confluence.oraclecorp.com/confluence/x/O4G_Bg . === We especially recommend reading "What information is required in the === Public Licenses & Copyright Notices field?" and "What is a copyright === notice? Where do I find it?" === ========== ========== ---------- Top-level license ---------- === Insert the full text of the top-level license(s) for the component here. === This is the license that covers the entire component. If the component === is offered under multiple licenses or a choice of licenses, enter all === of them. Do not enter only a URL. === ========== ========== Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ Apache License, version 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		== NAME OF DEPENDENCY 1 mockserver-netty mockserver-client-java mockserver-core == License Apache License 2.0 Apache License, version 2.0 - See Appendix E --- (separator)---------- == NAME OF DEPENDENCY 2 netty-buffer netty-codec-http netty-common netty-handler netty-transport netty-tcnative-boringssl-static == License Apache License, version 2.0 - See Appendix E --- (separator)---------- == NAME OF DEPENDENCY 3 commons-io == License Apache License 2.0 Apache License, version 2.0 - See Appendix E --- (separator)---------- == NAME OF DEPENDENCY 4 guava == License Apache License 2.0 Apache License, version 2.0 - See Appendix E --- (separator)---------- == NAME OF DEPENDENCY 4 slf4j-api == License MIT License (MIT) See Appendix G == Copyright Notices Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland) --- (separator)----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Mockito	mockito-inline 4.6.1	------------------------------ Top-level license ------------------------- Mockito MIT License (MIT) See Appendix G ------------------------------ Copyright notices ------------------------ /* * Copyright (c) 2007 Mockito contributors * This program is made available under the terms of the MIT License. */ ---------------------------- Fourth-party information -------------------- == NAME OF DEPENDENCY 1 mockito-core == License The MIT License MIT License (MIT) See Appendix G == Copyright Notices Copyright (c) 2007 Mockito contributors -------------------------------- (separator)-------------------------------- == NAME OF DEPENDENCY 2 byte-buddy byte-buddy-agent == License Apache License Apache License, version 2.0 - See Appendix E ------------------------------ (separator)-------------------------------- == NAME OF DEPENDENCY 3 objenesis == License: Apache 2.0 == Copyright Notices /* * Copyright 2006-2022 Joe Walnes * * Licensed under the Apache License, Version

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Coda Hale	metrics-core 4.1.32	o.dropwizard.metrics:metrics-core Copyright (c) 2010-2013 Coda Hale, Yammer.com, 2014-2021 Dropwizard Team Published under Apache Software License 2.0 LICENSE: Apache 2.0 Apache License, version 2.0 - See Appendix E ========== Modules: metrics-core ========== Notice File: This product includes code derived from the JSR-166 project (ThreadLocalRandom, Striped64, LongAdder), which was released with the following comments: Written by Doug Lea with assistance from members of JCP JSR-166 Expert Group and released to the public domain, as explained at http://creativecommons.org/publicdomain/zero/1.0/ ========== Dependencies: org.slf4j slf4j-api MIT License (MIT) See Appendix G
Fedor Indutny	ip 1.1.8	ip --- This software is licensed under the MIT License. MIT License (MIT) See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

Sindre Sorhus	import-fresh 3.3.0	`MIT License`
		
		`Copyright (c) Sindre Sorhus (sindresorhus.com)`
		
		MIT License (MIT)
		See Appendix G
		
		`############4th party dependencies##########`
		`"parent-module": "^1.0.0", MIT`
		
		MIT License (MIT)
		See Appendix G

Apache Software Foundation	HttpCore NIO 4.4.15	`HttpCore NIO`
		
		`License : Apache 2.0`
		
		`Notice:`
		
		`Apache HttpComponents Core`
		`Copyright 2005-2020 The Apache Software Foundation`
		
		`This product includes software developed at The Apache Software Foundation (http://www.apache.org/).`
		
		Apache License, version 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Mike Rooney, Richard Bywater	HTML Publisher Plug-in 1.28 HTML Publisher Plug-in 1.31	htmlpublisher-plugin,1.28 (HTML Publisher) MIT License (MIT) See Appendix G -------- 4TH PARTY DEPENDENCIES --------- workflow-step-api-plugin(Pipeline: Step API) ~ MIT License (MIT) See Appendix G ********** ********** ********** matrix-project-plugin (Matrix Project Plugin) The MIT License Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi Copyright 2014 Jesse Glick. Copyright (c) 2015 Red Hat, Inc. Copyright (c) 2010-2011, Alan Harder Copyright 2016 EvilTK. Copyright (c) 2004-2011, Sun Microsystems, Inc., CloudBees, Inc. Copyright (c) 2004-2010, Sun Microsystems, Inc. Kohsuke Kawaguchi. Knud Poulsen Copyright 2012 sogabe Copyright (c) 2013, Chunghwa Telecom Co., Ltd., Pei-Tang Huang Copyright (c) 2006, 2008 Junio C Hamano Copyright (c) 2010, InfraDNA, Inc. Begin license text. Copyright MIT License (MIT) See Appendix G End license text.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Kubernetes Authors	client-go 0.22.6	k8s.io/client-go -------- Copyrights Copyright The Kubernetes Authors. Copyright 2021 The Kubernetes Authors. Copyright 2016 The Kubernetes Authors. Copyright 2017 The Kubernetes Authors. Copyright 2019 The Kubernetes Authors. Copyright 2015 The Kubernetes Authors. Copyright 2014 The Kubernetes Authors. Copyright 2018 The Kubernetes Authors. Copyright 2020 The Kubernetes Authors. Copyright (c) 2009 The Go Authors. All rights reserved. -------- License SPDX:Apache-2.0 Apache License, version 2.0 - See Appendix E ---------- Dependencies Grouped by License ---------- -------- Dependency github.com/evanphx/json-patch -------- Copyrights Copyright (c) 2014, Evan Phoenix -------- Dependencies Summary github.com/evanphx/json-patch -------- License used by Dependencies Copyright (c) 2014, Evan Phoenix All rights reserved. See Appendix M ---------- Dependencies Grouped by License ---------- -------- Dependency github.com/pkg/errors -------- Copyrights Copyright (c) 2015, Dave Cheney -------- Dependencies Summary github.com/pkg/errors -------- License used by Dependencies Copyright (c) 2015, Dave Cheney All rights reserved. See Appendix M ---------- Dependencies Grouped by License ---------- -------- Dependency

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		github.com/gregjones/httpcache -------- Copyrights Copyright © 2012 Greg Jones (greg.jones@gmail.com) -------- Dependencies Summary github.com/gregjones/httpcache -------- License used by Dependencies Copyright © 2012 Greg Jones (greg.jones@gmail.com) See Appendix G ---------- Dependencies Grouped by License ---------- -------- Dependency sigs.k8s.io/json -------- Copyrights Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2021 The Kubernetes Authors. Copyright 2011 The Go Authors. All rights reserved. Copyright 2010 The Go Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. -------- Dependencies Summary sigs.k8s.io/json -------- License used by Dependencies Files other than internal/golang/* licensed under: Apache License, version 2.0 - See Appendix E ---------- internal/golang/* files licensed under: Copyright (c) 2009 The Go Authors. All rights reserved. See Appendix M ---------- Dependencies Grouped by License ---------- -------- Dependency cloud.google.com/go -------- Copyrights Copyright 2021 Google LLC Copyright 2019 Google LLC Copyright 2020 Google LLC Copyright 2016 Google LLC Copyright (c) 1996-1998 John D. Polstra. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2001 David E. O'Brien Portions Copyright 2018 Google LLC. Copyright 2018 Google LLC Copyright 2014 Google LLC Copyright 2017 Google LLC Copyright 2018 Google Inc. All Rights Reserved. Copyright 2020, Google LLC Copyright 2009 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. Copyright 2012 The Go Authors. All rights reserved. {"Copyright 2012 Google, Inc. Package foo does bar.", 27, ""}, Copyright (c) 2020 The Go Authors. All rights reserved. Copyright 2020 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All rights reserved. Copyright 2017, Google LLC -------- Dependency github.com/Azure/go-autorest/autorest -------- Copyrights Copyright 2015 Microsoft Corporation Copyright 2017 Microsoft Corporation -------- Dependency github.com/Azure/go-autorest/autorest/adal -------- Copyrights Copyright 2015 Microsoft Corporation Copyright 2017 Microsoft Corporation -------- Dependency github.com/Azure/go-autorest/autorest/date -------- Copyrights Copyright 2015 Microsoft Corporation Copyright 2017 Microsoft Corporation -------- Dependency github.com/Azure/go-autorest/logger -------- Copyrights Copyright 2015 Microsoft Corporation Copyright 2017 Microsoft Corporation -------- Dependency github.com/Azure/go-autorest/tracing -------- Copyrights Copyright 2015 Microsoft Corporation Copyright 2017 Microsoft Corporation Copyright 2018 Microsoft Corporation

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		-------- Dependency github.com/go-logr/logr -------- Copyrights Copyright 2021 The logr Authors. Copyright 2020 The logr Authors. Copyright 2019 The logr Authors. -------- Dependency github.com/golang/groupcache -------- Copyrights Copyright 2012 Google Inc. Copyright 2013 Google Inc. -------- Dependency github.com/google/btree -------- Copyrights Copyright 2014 Google Inc. -------- Dependency github.com/google/gofuzz -------- Copyrights Copyright 2014 Google Inc. All rights reserved. -------- Dependency github.com/googleapis/gnostic -------- Copyrights Copyright 2017-2020, Google LLC. Copyright 2019 Google LLC. All Rights Reserved. Copyright 2017 Google LLC. All Rights Reserved. Copyright 2020 Google LLC. All Rights Reserved. Copyright 2018 Google LLC. All Rights Reserved. Copyright 2020 Google LLC. All Rights Reserved.\n" + -------- Dependency github.com/moby/spdystream -------- Copyrights Copyright 2014-2021 Docker Inc. Copyright 2013-2021 Docker, inc. Released under the [Apache 2.0 license](LICENSE). Copyright 2013 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. -------- Notices SpdyStream Copyright 2014-2021 Docker Inc. This product includes software developed at Docker Inc. (https://www.docker.com/). -------- Dependency

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		github.com/modern-go/concurrent -------- Copyrights (no copyright notices found) -------- Dependency github.com/modern-go/reflect2 -------- Copyrights (no copyright notices found) -------- Dependency gopkg.in/yaml.v2 -------- Copyrights Copyright (c) 2006 Kirill Simonov Copyright 2011-2016 Canonical Ltd. -------- Notices Copyright 2011-2016 Canonical Ltd. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. -------- Dependency k8s.io/api -------- Copyrights Copyright 2019 The Kubernetes Authors. Copyright The Kubernetes Authors. Copyright 2017 The Kubernetes Authors. Copyright 2016 The Kubernetes Authors. Copyright 2015 The Kubernetes Authors. Copyright 2021 The Kubernetes Authors. Copyright 2018 The Kubernetes Authors. Copyright 2020 The Kubernetes Authors. -------- Dependency k8s.io/apimachinery -------- Copyrights

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2021 The Kubernetes Authors. Copyright 2017 The Kubernetes Authors. Copyright 2019 The Kubernetes Authors. Copyright 2014 The Kubernetes Authors. Copyright 2020 The Kubernetes Authors. Copyright 2015 The Kubernetes Authors. Copyright 2016 The Kubernetes Authors. Copyright 2018 The Kubernetes Authors. Copyright The Kubernetes Authors. Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. Copyright 2009 The Go Authors. All rights reserved. -------- Dependency k8s.io/klog/v2 -------- Copyrights Copyright 2013 Google Inc. All Rights Reserved. Copyright 2020 The Kubernetes Authors. -------- Dependency k8s.io/kube-openapi -------- Copyrights Copyright The Kubernetes Authors. Copyright 2018 The Kubernetes Authors. Copyright 2017 The Kubernetes Authors. Copyright 2016 The Kubernetes Authors. Copyright 2021 The Kubernetes Authors. Copyright 2020 The Kubernetes Authors. Copyright 2019 The Kubernetes Authors. Copyright 2015 go-swagger maintainers Copyright 2017 go-swagger maintainers Copyright (C) MongoDB, Inc. 2017-present. -------- Dependency k8s.io/utils -------- Copyrights Copyright 2018 The Kubernetes Authors. Copyright 2017 The Kubernetes Authors. Copyright 2014 The Kubernetes Authors. Copyright 2015 The Kubernetes Authors. Copyright 2021 The Kubernetes Authors. Copyright 2016 The Kubernetes Authors. Copyright 2020 The Kubernetes Authors. Copyright 2019 The Kubernetes Authors. Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2010 The Go Authors. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2012 The Go Authors. All rights reserved. Copyright 2013 Google Inc. Copyright 2009 The Go Authors. All rights reserved. -------- Dependency sigs.k8s.io/structured-merge-diff/v4 -------- Copyrights Copyright 2018 The Kubernetes Authors. Copyright 2019 The Kubernetes Authors. Copyright 2020 The Kubernetes Authors. -------- Dependencies Summary cloud.google.com/go github.com/Azure/go-autorest/autorest github.com/Azure/go-autorest/autorest/adal github.com/Azure/go-autorest/autorest/date github.com/Azure/go-autorest/logger github.com/Azure/go-autorest/tracing github.com/go-logr/logr github.com/golang/groupcache github.com/google/btree github.com/google/gofuzz github.com/googleapis/gnostic github.com/moby/spdystream github.com/modern-go/concurrent github.com/modern-go/reflect2 gopkg.in/yaml.v2 k8s.io/api k8s.io/apimachinery k8s.io/klog/v2 k8s.io/kube-openapi k8s.io/utils sigs.k8s.io/structured-merge-diff/v4 -------- License used by Dependencies SPDX:Apache-2.0 Apache License, version 2.0 - See Appendix E ---------- Dependencies Grouped by License ---------- -------- Dependency github.com/gogo/protobuf -------- Copyrights Copyright (c) 2013, The GoGo Authors. All rights reserved. Copyright 2010 The Go Authors. All rights reserved. Copyright 2010 The Go Authors.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2015, The GoGo Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. Copyright (c) 2018, The GoGo Authors. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All rights reserved. Copyright (c) 2016, The GoGo Authors. All rights reserved. Copyright 2014 The Go Authors. All rights reserved. Copyright 2012 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. Copyright (c) 2019, The GoGo Authors. All rights reserved. Copyright (c) 2017, The GoGo Authors. All rights reserved. Copyright (c) 2015, The GoGo Authors. rights reserved. -------- Dependency github.com/golang/protobuf -------- Copyrights Copyright 2010 The Go Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Copyright 2020 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All rights reserved. Copyright 2010 The Go Authors. All rights reserved. Copyright 2014 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. -------- Dependency github.com/google/go-cmp -------- Copyrights Copyright (c) 2017 The Go Authors. All rights reserved. Copyright 2017, The Go Authors. All rights reserved. Copyright 2021, The Go Authors. All rights reserved. Copyright 2020, The Go Authors. All rights reserved. Copyright 2018, The Go Authors. All rights reserved. Copyright 2019, The Go Authors. All rights reserved. -------- Dependency github.com/google/uuid

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		-------- Copyrights Copyright (c) 2009,2014 Google Inc. All rights reserved. Copyright 2016 Google Inc. All rights reserved. Copyright 2017 Google Inc. All rights reserved. Copyright 2018 Google Inc. All rights reserved. -------- Dependency github.com/imdario/mergo -------- Copyrights Copyright (c) 2013 Dario Castañé. All rights reserved. Copyright (c) 2012 The Go Authors. All rights reserved. Copyright 2013 Dario Castañé. All rights reserved. Copyright 2009 The Go Authors. All rights reserved. Copyright 2014 Dario Castañé. All rights reserved. -------- Dependency github.com/spf13/pflag -------- Copyrights Copyright (c) 2012 Alex Ogier. All rights reserved. Copyright (c) 2012 The Go Authors. All rights reserved. Copyright 2009 The Go Authors. All rights reserved. Copyright 2012 The Go Authors. All rights reserved. Copyright 2010 The Go Authors. All rights reserved. -------- Dependency golang.org/x/crypto -------- Copyrights Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. Copyright 2010 The Go Authors. All rights reserved. Copyright 2012 The Go Authors. All rights reserved. Copyright (c) 2017 The Go Authors. All rights reserved. Copyright (c) 2019 The Go Authors. All rights reserved. Copyright (c) 2020 The Go Authors. All rights reserved. Copyright (c) 2021 The Go Authors. All rights reserved. Copyright 2014 The Go Authors. All rights reserved. Copyright 2020 The Go Authors. All rights reserved. Copyright 2009 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. -------- Patents Additional IP Rights Grant (Patents)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		"This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed. -------- Dependency golang.org/x/net -------- Copyrights Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All rights reserved. Copyright 2014 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. Copyright 2010 The Go Authors. All rights reserved. Copyright 2009 The Go Authors. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2012 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. Copyright (C) 2009 Apple Inc. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2021 The Go Authors. All rights reserved. Copyright 2020 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. -------- Patents Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		-------- Dependency golang.org/x/oauth2 -------- Copyrights Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2017 The oauth2 Authors. All rights reserved. Copyright 2021 The Go Authors. All rights reserved. Copyright 2015 The oauth2 Authors. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2014 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Copyright 2020 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All rights reserved. Copyright 2018 The oauth2 Authors. All rights reserved. -------- Dependency golang.org/x/sys -------- Copyrights Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2020 The Go Authors. All rights reserved. Copyright 2012 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. Copyright 2009 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All rights reserved. Copyright 2010 The Go Authors. All rights reserved. Copyright 2014 The Go Authors. All rights reserved. Copyright 2021 The Go Authors. All rights reserved. Copyright 2009,2010 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All right reserved. -------- Patents Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed. -------- Dependency golang.org/x/term -------- Copyrights Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. Copyright 2021 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. -------- Patents Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed. -------- Dependency golang.org/x/text -------- Copyrights Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2014 The Go Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All rights reserved. Copyright 2012 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2009 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. -------- Patents Additional IP Rights Grant (Patents)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		"This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed. -------- Dependency golang.org/x/time -------- Copyrights Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. -------- Patents Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the Go project.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed. -------- Dependency google.golang.org/protobuf -------- Copyrights Copyright (c) 2018 The Go Authors. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. Copyright 2020 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved.", Copyright 2018 The Go Authors. All rights reserved.", Copyright 2008 Google Inc. All rights reserved. Copyright 2021 The Go Authors. All rights reserved. -------- Patents Additional IP Rights Grant (Patents)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		"This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed. -------- Dependency gopkg.in/inf.v0 -------- Copyrights Copyright (c) 2012 Péter Surányi. Portions Copyright (c) 2009 The Go -------- Dependencies Summary github.com/gogo/protobuf github.com/golang/protobuf github.com/google/go-cmp github.com/google/uuid

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		github.com/imdario/mergo github.com/spf13/pflag golang.org/x/crypto golang.org/x/net golang.org/x/oauth2 golang.org/x/sys golang.org/x/term golang.org/x/text golang.org/x/time google.golang.org/protobuf gopkg.in/inf.v0 -------- License used by Dependencies SPDX:BSD-3-Clause--modified-by-Google Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. * Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ---------- Dependencies Grouped by License ---------- -------- Dependency github.com/davecgh/go-spew -------- Copyrights Copyright (c) 2012-2016 Dave Collins Copyright (c) 2015-2016 Dave Collins Copyright (c) 2013-2016 Dave Collins Copyright (c) 2013 Dave Collins -------- Dependencies Summary github.com/davecgh/go-spew -------- License used by Dependencies SPDX:ISC Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ---------- Dependencies Grouped by License ---------- -------- Dependency github.com/form3tech-oss/jwt-go -------- Copyrights Copyright (c) 2012 Dave Grijalva

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		-------- Dependency github.com/json-iterator/go -------- Copyrights Copyright (c) 2016 json-iterator -------- Dependency github.com/peterbourgon/diskv -------- Copyrights Copyright (c) 2011-2012 Peter Bourgon -------- Dependency gopkg.in/yaml.v3 -------- Copyrights copyright staring in 2011 when the project was ported over: Copyright (c) 2006-2010 Kirill Simonov Copyright (c) 2006-2011 Kirill Simonov Copyright (c) 2011-2019 Canonical Ltd Copyright 2011-2016 Canonical Ltd. -------- Notices Copyright 2011-2016 Canonical Ltd. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. -------- Dependencies Summary github.com/form3tech-oss/jwt-go github.com/json-iterator/go github.com/peterbourgon/diskv gopkg.in/yaml.v3 -------- License used by Dependencies SPDX:MIT See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- Dependencies Grouped by License ---------- -------- Dependency sigs.k8s.io/yaml -------- Copyrights Copyright (c) 2014 Sam Ghods Copyright (c) 2012 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. -------- Dependencies Summary sigs.k8s.io/yaml -------- License used by Dependencies The MIT License (MIT) See Appendix G

QOS.ch	slf4j-api 1.7.32	`Copyright (c) 2004-2017 QOS.ch`
		`All rights reserved.`
		
		See Appendix G

ISC	bind-utils 9.11.26-3 bind-utils 9.11.36-5	Mozilla Public License, version 2.0 - See Appendix R
fabric8io	kubernetes-client 5.6.0 kubernetes-client 5.12.2	`Copyright (C) 2015 Red Hat, Inc` Apache License, version 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Jenkins CI	Blue Ocean 1.27.1	********** ********** ********** Copied from BA Public License ********** ********** ********** ********* Copied from LT Public License & Copyright Notices ********* The MIT License Copyright (c) 2016 CloudBees Inc and a number of other of contributors Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

Tomaz Solc	jsonmerge 1.8.0	`jsonmerge`
		`Copyright 2021, Tomaz Solc`
		
		MIT License See Appendix G
		
		--- 	
		`jsonschema`
		
		MIT License See Appendix G
		
		--- 	
		`pyrsistent`
		
		MIT License See Appendix G

Benno Rice, Richard Jones and Jens Engel	behave 1.2.6	`Copyright (c) 2012-2014 Benno Rice, Richard Jones, Jens Engel and others, except where noted.`
		`All rights reserved.`
		
		See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
hapijs	@hapi/inert 6.0.5	@hapi/inert Copyright (c) 2012-2020, Sideway Inc, and project contributors Copyright (c) 2014-2019, Gil Pedersen Copyright (c) 2012-2014, Walmart. All rights reserved. See Appendix M THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS AND CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ==========4th party dependencies========== @hapi/ammo, BSD-style license Copyright (c) 2014-2017, Project contributors Copyright (c) 2014, Walmart All rights reserved. See Appendix M ---------- @hapi/hoek, BSD-style license Copyright (c) 2011-2017, Project contributors Copyright (c) 2011-2014, Walmart Copyright (c) 2011, Yahoo Inc. All rights reserved. See Appendix M ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		@hapi/boom, BSD-style license Copyright (c) 2012-2017, Project contributors. Copyright (c) 2012-2014, Walmart. All rights reserved. See Appendix M ---------- @hapi/bounce, BSD-style license Copyright (c) 2017, Project contributors. All rights reserved. See Appendix M ---------- @hapi/validate, BSD-3-Clause License Copyright (c) 2012-2022, Project contributors Copyright (c) 2012-2020, Sideway Inc Copyright (c) 2012-2014, Walmart. All rights reserved. See Appendix M ---------- @hapi/topo, BSD-3-Clause License Copyright (c) 2012-2022, Project contributors Copyright (c) 2012-2020, Sideway Inc Copyright (c) 2012-2014, Walmart. All rights reserved. See Appendix M ---------- lru-cache MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- ---------- yallist The ISC License Copyright (c) 2015-2022 Isaac Z. Schlueter and Contributors Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ---------- ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
hapijs	@hapi/wreck 18.0.0	@hapi/wreck Copyright (c) 2012-2022, Project contributors Copyright (c) 2012-2020, Sideway Inc Copyright (c) 2012-2014, Walmart. All rights reserved. See Appendix M ==========4th party dependencies========== @hapi/boom Copyright (c) 2012-2017, Project contributors. Copyright (c) 2012-2014, Walmart. All rights reserved. See Appendix M --- @hapi/hoek Copyright (c) 2011-2017, Project contributors Copyright (c) 2011-2014, Walmart Copyright (c) 2011, Yahoo Inc. All rights reserved. See Appendix M --- @hapi/bourne Copyright (c) 2019-2022, Project contributors Copyright (c) 2019-2020, Sideway Inc All rights reserved. See Appendix M ---

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
hapijs	hapi 20.21	Copyright (c) 2011-2020, Sideway Inc, and project contributors Copyright (c) 2011-2014, Walmart Copyright (c) 2011, Yahoo Inc. All rights reserved. See Appendix M * * * The complete list of contributors can be found at: https://github.com/hapijs/hapi/graphs/contributors Portions of this project were initially based on the Yahoo! Inc. Postmile project, published at https://github.com/yahoo/postmile. ========== Below are 4th party depencencies ========== ++++++++++ wreck, v17.0.0, BSD-style license Copyright (c) 2012-2017, Project contributors Copyright (c) 2012-2014, Walmart All rights reserved. See Appendix M ++++++++++ topo, v5.0.0, BSD-style license Copyright (c) 2014-2016, Project contributors Copyright (c) 2014, Walmart All rights reserved. See Appendix M ++++++++++ teamwork, v4.0.0, BSD-style license Copyright (c) 2015-2017, Eran Hammer and Project contributors All rights reserved. See Appendix M ++++++++++

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		subtext, v7.0.3, BSD-style license statehood, v7.0.2, BSD-style license shot, v5.0.0, BSD-Style license mimos, v5.0.0, BSD-Style license call, v8.0.0, BSD-style license ammo, v5.0.1, BSD-style license Copyright (c) 2014-2017, Project contributors Copyright (c) 2014, Walmart All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++++ podium, v4.0.0, BSD-style license Copyright (c) 2016-2017, Project contributors All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++++ joi, v17.0.0, BSD-style license Copyright (c) 2014-2018, Project contributors Copyright (c) 2014, Walmart All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++++ hoek, v9.0.0, BSD-style license Copyright (c) 2011-2017, Project contributors Copyright (c) 2011-2014, Walmart Copyright (c) 2011, Yahoo Inc. All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++++ heavy, v7.0.0, BSD-style license Copyright (c) 2013-2017, Project contributors Copyright (c) 2013-2014, Walmart All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See Appendix M ++++++++++++++++++++++++++++++++++ catbox-memory, v5.0.0, BSD-style license catbox, v11.1.0, BSD-style license Copyright (c) 2012-2018, Project contributors Copyright (c) 2012-2014, Walmart All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ bounce, v2.0.0, BSD-style license Copyright (c) 2017, Project contributors. All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ boom, v9.0.0, BSD-style license Copyright (c) 2012-2017, Project contributors. Copyright (c) 2012-2014, Walmart. All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ accept, v5.0.1, BSD-style license Copyright (c) 2014-2017, Project contributors. Copyright (c) 2015-2016, Mark Bradshaw Copyright (c) 2014, Walmart. All rights reserved. See Appendix M .

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
ISC	bind-utils 9.11.36-3	Mozilla Public License, version 2.0 - See Appendix R Copyright (C) 1996-2019 Internet Systems Consortium, Inc. ("ISC") This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at http://mozilla.org/MPL/2.0/. ---------- -- Portions of this code release fall under one or more of the following Copyright notices. Please see individual source files for details. For binary releases also see: OpenSSL-LICENSE. Copyright (C) 1996-2001 Nominum, Inc. Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND NOMINUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL NOMINUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ---------- -- Copyright (C) 1995-2000 by Network Associates, Inc. Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		THE SOFTWARE IS PROVIDED "AS IS" AND ISC AND NETWORK ASSOCIATES DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL ISC BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ---------- -- Copyright (C) 2002 Stichting NLnet, Netherlands, stichting@nlnet.nl. Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND STICHTING NLNET DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL STICHTING NLNET BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. The development of Dynamically Loadable Zones (DLZ) for Bind 9 was conceived and contributed by Rob Butler. Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND ROB BUTLER DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL ROB BUTLER BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ---------- -- Copyright (c) 1987, 1990, 1993, 1994 The Regents of the University of California. All rights reserved. See Appendix M ---------- -- Copyright (C) The Internet Society 2005. This version of this module is part of RFC 4178; see the RFC itself for full legal notices. (The above copyright notice is per RFC 3978 5.6 (a), q.v.) ---------- -- Copyright (c) 2004 Masarykova universita (Masaryk University, Brno, Czech Republic) All rights reserved. See Appendix M ---------- -- Copyright (c) 1997 - 2003 Kungliga Tekniska Högskolan (Royal Institute of Technology, Stockholm, Sweden). All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- -- Copyright (c) 1998 Doug Rabson All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: See Appendix M ---------- -- Copyright ((c)) 2002, Rice University All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. * Neither the name of Rice University (RICE) nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. This software is provided by RICE and the contributors on an "as is" basis, without any representations or warranties of any kind, express or implied including, but not limited to, representations or warranties of non-infringement, merchantability or fitness for a particular purpose. In no event shall RICE or contributors be liable for any direct, indirect, incidental, special, exemplary, or

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		consequential damages (including, but not limited to, procurement of substitute goods or services; loss of use, data, or profits; or business interruption) however caused and on any theory of liability, whether in contract, strict liability, or tort (including negligence or otherwise) arising in any way out of the use of this software, even if advised of the possibility of such damage. ---------- -- Copyright (c) 1993 by Digital Equipment Corporation. Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies, and that the name of Digital Equipment Corporation not be used in advertising or publicity pertaining to distribution of the document or software without specific, written prior permission. THE SOFTWARE IS PROVIDED "AS IS" AND DIGITAL EQUIPMENT CORP. DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL DIGITAL EQUIPMENT CORPORATION BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ---------- -- Copyright 2000 Aaron D. Gifford. All rights reserved. See Appendix M ---------- --

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 1998 Doug Rabson. Copyright (c) 2001 Jake Burkholder. All rights reserved. See Appendix M --- -- Copyright (C) 1995, 1996, 1997, and 1998 WIDE Project. All rights reserved. See Appendix M --- -- Copyright (c) 1999-2000 by Nortel Networks Corporation Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND NORTEL NETWORKS DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL NORTEL NETWORKS BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. --- -- Copyright (c) 2000-2002 Japan Network Information Center. All rights reserved. By using this file, you agree to the terms and conditions set forth bellow. LICENSE TERMS AND CONDITIONS The following License Terms and Conditions apply, unless a different

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		license is obtained from Japan Network Information Center ("JPNIC"), a Japanese association, Kokusai-Kougyou-Kanda Bldg 6F, 2-3-4 Uchi-Kanda, Chiyoda-ku, Tokyo 101-0047, Japan. 1. Use, Modification and Redistribution (including distribution of any modified or derived work) in source and/or binary forms is permitted under this License Terms and Conditions. 2. Redistribution of source code must retain the copyright notices as they appear in each source code file, this License Terms and Conditions. 3. Redistribution in binary form must reproduce the Copyright Notice, this License Terms and Conditions, in the documentation and/or other materials provided with the distribution. For the purposes of binary distribution the "Copyright Notice" refers to the following language: "Copyright (c) 2000-2002 Japan Network Information Center. All rights reserved." 4. The name of JPNIC may not be used to endorse or promote products derived from this Software without specific prior written approval of JPNIC. 5. Disclaimer/Limitation of Liability: THIS SOFTWARE IS PROVIDED BY JPNIC "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL JPNIC BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. ---------- -- Copyright (C) 2004 Nominet, Ltd. Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND NOMINET DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL ISC BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ---------- -- Portions Copyright RSA Security Inc. License to copy and use this software is granted provided that it is identified as "RSA Security Inc. PKCS #11 Cryptographic Token Interface (Cryptoki)" in all material mentioning or referencing this software. License is also granted to make and use derivative works provided that such works are identified as "derived from the RSA Security Inc. PKCS #11 Cryptographic Token Interface (Cryptoki)" in all material mentioning or referencing the derived work. RSA Security Inc. makes no representations concerning either the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		merchantability of this software or the suitability of this software for any particular purpose. It is provided "as is" without express or implied warranty of any kind. --- -- Copyright (c) 1996, David Mazieres <dm@uun.org> Copyright (c) 2008, Damien Miller <djm@openbsd.org> Permission to use, copy, modify, and distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. --- -- Copyright (c) 2000-2001 The OpenSSL Project. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		the documentation and/or other materials provided with the distribution. 3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.OpenSSL.org/)" 4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact licensing@OpenSSL.org. 5. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project. 6. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.OpenSSL.org/)" THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. --- -- Copyright (c) 1995, 1997, 1998 The NetBSD Foundation, Inc. All rights reserved. See Appendix M --- -- Copyright (C) 2008-2011 Red Hat, Inc. Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND Red Hat DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL Red Hat BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. --- -- Copyright (c) 2013-2014, Farsight Security, Inc. All rights reserved. See Appendix M --- -- Copyright (c) 2014 by Farsight Security, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.
Google Inc.	Blockly 8.0.0	Apache License, version 2.0 - See Appendix E
OpenZipkin	Brave 5.14.0	Apache License, version 2.0 - See Appendix E

The OpenZipkin Authors	Brave OpenTracing Java Bridge for Zipkin 1.0.0	`Zipkin OpenTracing Brave (io.opentracing.brave:brave-opentracing)`
		`  Copyright 2016-2020 The OpenZipkin Authors`
		`----------`
		Apache License, version 2.0 - See Appendix E

Vladimir Bukhtoyarov	bucket4j 7.6.0	Apache License, version 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Ben Manes	caffeine 3.0.5	/* * Copyright 2015 Ben Manes. All Rights Reserved. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Apache License, version 2.0 - See Appendix E ********** ********** 4th Party Dependencies ++++++++++++++ akka-actor, v2.6.5, BSD license Copyright 2008, Google Inc. All rights reserved. See Appendix M Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license. ++++++++++++++++++++ cache2k-core, 1.3.1.Alpha, Apache 2.0 /* * #%L * cache2k implementation * %% * Copyright (C) 2000 - 2020 headissue GmbH,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Munich * %% * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. * #L% */ ++++++++++++++++++++++++++ checker-qual, v3.4.1, MIT Checker Framework qualifiers Copyright 2004-present by the Checker Framework developers MIT License See Appendix G ++++++++++++++++ collision, v0.3.3, Apache 2.0 No copyright info found from source code. ++++++++++++++++ commonsCompress, v1.20, Apache 2.0 commonsLang3, v3.10, Apache 2.0 commonsMath3, v3.6.1, Apache 2.0 Copyright 2001-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/).

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Ben Manes	caffeine 2.8.5 caffeine 2.9.2	/* * Copyright 2015 Ben Manes. All Rights Reserved. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Apache License, version 2.0 - See Appendix E ********** 4th Party Dependencies ++++++++++++++ akka-actor, v2.6.5, BSD license Copyright 2008, Google Inc. All rights reserved. See Appendix M Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license. ++++++++++++++++++++ cache2k-core, 1.3.1.Alpha, Apache 2.0 /* * #%L * cache2k implementation * %% * Copyright (C) 2000 - 2020 headissue GmbH,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Munich * %% * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. * #L% */ ++++++++++++++++++++++++++ checker-qual, v3.4.1, MIT Checker Framework qualifiers Copyright 2004-present by the Checker Framework developers MIT License See Appendix G ++++++++++++++++ collision, v0.3.3, Apache 2.0 No copyright info found from source code. ++++++++++++++++ commonsCompress, v1.20, Apache 2.0 commonsLang3, v3.10, Apache 2.0 commonsMath3, v3.6.1, Apache 2.0 Copyright 2001-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/).

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Oracle and/or its affiliates	coherence-spring-boot-starter 3.0.0	Top Level Component : coherence-spring-boot-starter ---------- Top Level Component License : The Universal Permissive License ---------- Top Level Component Copyright: ---------- Copyright (c) 2013, 2020, Oracle and/or its affiliates. The Universal Permissive License (UPL), Version 1.0 Subject to the condition set forth below, permission is hereby granted to any person obtaining a copy of this software, associated documentation and/or data (collectively the "Software"), free of charge and under any and all copyright rights in the Software, and any and all patent rights owned or freely licensable by each licensor hereunder covering either (i) the unmodified Software as contributed to or provided by such licensor, or (ii) the Larger Works (as defined below), to deal in both (a) the Software, and (b) any piece of software and/or hardware listed in the lrgrwrks.txt file if one is included with the Software (each a "Larger Work" to which the Software is contributed by such licensors), without restriction, including without limitation the rights to copy, create derivative works of, display, perform, and distribute the Software and make, use, sell, offer for sale, import, export, have made, and have sold the Software and the Larger Work(s), and to sublicense the foregoing rights on either these or other terms. See Appendix G ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== 4th Party component 1: Spring Framework/spring-boot-autoconfigure,spring-boot-configuration-processor, spring-boot-starter-validation 4th Party component 1 licence: Apache 2.0 ========== This file lists dependencies that are used at runtime by an application built using this code. The following software (or certain identified files distributed with the software) may be included in this product. Unless otherwise specified, the software identified in this file is licensed under the licenses described below. The disclaimers and copyright notices provided are based on information made available to Oracle by the third party licensors listed. The following applies to all products licensed under the Apache 2.0 License: You may not use the identified files except in compliance with the Apache License, Version 2.0 (the "License.") You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. A copy of the license is also reproduced below. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ TERMS AND CONDITIONS FOR USE, REPRODUCTION,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		AND DISTRIBUTION 1. Definitions. "License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document. "Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License. "Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity. "You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License. "Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files. "Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types. "Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof. "Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution." "Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work. 2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form. 3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed. 4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions: (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and (b) You must cause any modified files to carry prominent notices stating that You changed the files; and (c) You must retain, in the Source form of any

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License. 5. Submission of Contributions. Unless You

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions. 6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file. 7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License. 8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages. 9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability. END OF TERMS AND CONDITIONS APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright [yyyy] [name of copyright owner]

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== ========== 4th Party component 2: Coherence CE/coherence-spring-core,coherence-java-client 4th Party component 2 licence: The Universal Permissive License ========== ========== ========== # Coherence CE Copyright (c) 2013, 2020, Oracle and/or its affiliates. The Universal Permissive License (UPL), Version 1.0 Subject to the condition set forth below, permission is hereby granted to any person obtaining a copy of this software, associated documentation and/or data (collectively the "Software"), free of charge and under any and all copyright rights in the Software, and any and all patent rights owned or freely licensable by each licensor hereunder covering either (i) the unmodified Software as contributed to or provided by such licensor, or (ii) the Larger Works (as defined below), to deal in both (a) the Software, and (b) any piece of software and/or hardware

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		listed in the lrgrwrks.txt file if one is included with the Software (each a "Larger Work" to which the Software is contributed by such licensors), without restriction, including without limitation the rights to copy, create derivative works of, display, perform, and distribute the Software and make, use, sell, offer for sale, import, export, have made, and have sold the Software and the Larger Work(s), and to sublicense the foregoing rights on either these or other terms. See Appendix G ========== ========== === 4th Party component 3: Javax Annotation API 4th Party component 3 licence: COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.0 ========== ========== === JSR-250 Common Annotations for the JavaTM Platform Copyright 2005-2006 Sun Microsystems, Inc. All Rights Reserved. See Appendix L ========== ========== === 4th Party component 7: javax.inject 4th Party component 7 licence: Apache licence 2.0 ========== ========== === Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.
Phillip Clark	deep-diff 1.0.2	Copyright (c) 2011-2018 Phillip Clark See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Prometheus Authors	client_golang 1.11.0	TOP-LEVEL COPYRIGHT NOTICE for client_golang -> 1.11.0 RELEASE --------- separator---------- TOP-LEVEL LICENSE TEXT for client_golang -> 1.11.0 RELEASE Apache License, version 2.0 - See Appendix E --------- separator---------- FOURTH-PARTY DEPENDENCY #1 github.com/beorn7/perks v1.0.1 FOURTH-PARTY DEPENDENCY #1 COPYRIGHT And LICENSE NOTICES MIT License See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #2 github.com/cespare/xxhash/v2 v2.1.1 FOURTH-PARTY DEPENDENCY #2 COPYRIGHT And LICENSE NOTICES MIT License See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #3 github.com/golang/protobuf v1.4.3 FOURTH-PARTY DEPENDENCY #3 COPYRIGHT And LICENSE NOTICES BSD 3-Clause "New" or "Revised" License Copyright 2010 The Go Authors. All rights reserved. See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #4 github.com/json-iterator/go v1.1.11 FOURTH-PARTY DEPENDENCY #4 COPYRIGHT And LICENSE NOTICES MIT License See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #5 github.com/prometheus/client_model v0.2.0 FOURTH-PARTY DEPENDENCY #5 COPYRIGHT And LICENSE NOTICES Apache License, version 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #6 github.com/prometheus/common v0.26.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #6 COPYRIGHT And LICENSE NOTICES Apache License, version 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #7 github.com/prometheus/procfs v0.6.0 FOURTH-PARTY DEPENDENCY #7 COPYRIGHT And LICENSE NOTICES Apache License, version 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #8 golang.org/x/sys v0.0.0-20210603081109-ebe580a85c40 FOURTH-PARTY DEPENDENCY #8 COPYRIGHT And LICENSE NOTICES Copyright (c) 2009 The Go Authors. All rights reserved. See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #9 golang.org/x/text v0.3.2 // indirect FOURTH-PARTY DEPENDENCY #9 COPYRIGHT And LICENSE NOTICES Copyright (c) 2009 The Go Authors. All rights reserved. See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #10 google.golang.org/protobuf v1.26.0-rc.1 // indirect FOURTH-PARTY DEPENDENCY #10 COPYRIGHT And LICENSE NOTICES Copyright (c) 2018 The Go Authors. All rights reserved. See Appendix M
Sam Clements	colorlog 6.6.0 colorlog 6.7.0	MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Nominum	dnspython 2.2.1	ISC License Copyright (C) Dnspython Contributors Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. Copyright (C) 2001-2017 Nominum, Inc. Copyright (C) Google Inc. Permission to use, copy, modify, and distribute this software and its documentation for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND NOMINUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL NOMINUM BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.
The Apache Software Foundation	Commons Collections 4.4	The following applies to all products licensed under the Apache 2.0 License: You may not use the identified files except in compliance with the Apache License, Version 2.0 (the "License.") You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. A copy of the license is also reproduced below. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Apache License, version 2.0 - See Appendix E
Apache	Commons CSV 1.8	Apache License, version 2.0 - See Appendix E
Apache	Commons IO 2.6 Commons IO 2.7 Commons IO 2.8.0 Commons IO 2.11.0	Apache License, version 2.0 - See Appendix E Fourth-party JUNIT Eclipse Public License 1.0 - See Appendix J
Apache	commons-lang 3.9 commons-lang 3.10	Apache License, version 2.0 - See Appendix E ---------- COPYRIGHT: Ships with following notice file: Apache Commons Lang Copyright 2001-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/).

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Apache Software Foundation	Commons Pool 2.8.0	TOP-LEVEL COPYRIGHT NOTICE : ---------- Apache Commons Pool Copyright 2001-2017 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Apache License, version 2.0 - See Appendix E W3C® SOFTWARE NOTICE AND LICENSE http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231 This work (and included software, documentation such as READMEs, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions. Permission to copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the software and documentation or portions thereof, including modifications: 1. The full text of this NOTICE in a location viewable to users of the redistributed or derivative work. 2. Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software Short Notice should be included (hypertext is preferred, text is permitted) within the body of any redistributed or derivative code. 3. Notice of any changes or modifications to the files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.) THIS SOFTWARE AND DOCUMENTATION IS PROVIDED ""AS IS,"" AND COPYRIGHT HOLDERS MAKE

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS. COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION. The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the software without specific, written prior permission. Title to copyright in this software and any associated documentation will at all times remain with copyright holders. _____ This formulation of W3C's notice and license became active on December 31 2002. This version removes the copyright ownership notice such that this license can be used with materials other than those owned by the W3C, reflects that ERCIM is now a host of the W3C, includes references to this specific dated version of the license, and removes the ambiguous grant of ""use"". Otherwise, this version is the same as the previous version and is written so as to preserve the Free Software Foundation's assessment of GPL compatibility and OSI's certification under the Open Source Definition. Please see our Copyright FAQ for common questions about using materials from our site, including specific terms and conditions for packages like libwww, Amaya, and Jigsaw. Other questions about this notice can be directed to site-policy@w3.org. Joseph Reagle <site-policy@w3.org> This license came from: http://www.megginson.com/SAX/copying.html

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		However please note future versions of SAX may be covered under http://saxproject.org/?selected=pd SAX2 is Free! I hereby abandon any property rights to SAX 2.0 (the Simple API for XML), and release all of the SAX 2.0 source code, compiled code, and documentation contained in this distribution into the Public Domain. SAX comes with NO WARRANTY or guarantee of fitness for any purpose. David Megginson, david@megginson.com 2000-05-05 ---------- ---------- FOURTH-PARTY DEPENDENCY #1 cglib-3.2.5.jar FOURTH-PARTY DEPENDENCY #1 COPYRIGHT NOTICES : ---------- This product includes software developed by The Apache Software Foundation (http://www.apache.org/). FOURTH-PARTY DEPENDENCY # 1: LICENSE : Apache 2.0 ---------- Apache License, version 2.0 - See Appendix E W3C® SOFTWARE NOTICE AND LICENSE http://www.w3.org/Consortium/Legal/2002/copyright-software-20021231 This work (and included software, documentation such as READMEs, or other related items) is being provided by the copyright holders under the following license. By obtaining, using and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions. Permission to copy, modify, and distribute this software and its documentation, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		software and documentation or portions thereof, including modifications: 1. The full text of this NOTICE in a location viewable to users of the redistributed or derivative work. 2. Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software Short Notice should be included (hypertext is preferred, text is permitted) within the body of any redistributed or derivative code. 3. Notice of any changes or modifications to the files, including the date changes were made. (We recommend you provide URIs to the location from which the code is derived.) THIS SOFTWARE AND DOCUMENTATION IS PROVIDED """"AS IS,"""" AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENTATION WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS. COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENTATION. The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the software without specific, written prior permission. Title to copyright in this software and any associated documentation will at all times remain with copyright holders. _____ This formulation of W3C's notice and license became active on December 31 2002. This version removes the copyright ownership notice such that this license can

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		be used with materials other than those owned by the W3C, reflects that ERCIM is now a host of the W3C, includes references to this specific dated version of the license, and removes the ambiguous grant of """"use"""". Otherwise, this version is the same as the previous version and is written so as to preserve the Free Software Foundation's assessment of GPL compatibility and OSI's certification under the Open Source Definition. Please see our Copyright FAQ for common questions about using materials from our site, including specific terms and conditions for packages like libwww, Amaya, and Jigsaw. Other questions about this notice can be directed to site-policy@w3.org. Joseph Reagle <site-policy@w3.org> This license came from: http://www.megginson.com/SAX/copying.html However please note future versions of SAX may be covered under http://saxproject.org/?selected=pd SAX2 is Free! I hereby abandon any property rights to SAX 2.0 (the Simple API for XML), and release all of the SAX 2.0 source code, compiled code, and documentation contained in this distribution into the Public Domain. SAX comes with NO WARRANTY or guarantee of fitness for any purpose. David Megginson, david@megginson.com 2000-05-05 --- FOURTH-PARTY DEPENDENCY #2 asm-util-6.0.jar FOURTH-PARTY DEPENDENCY #2 COPYRIGHT NOTICES : --- Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. FOURTH-PARTY DEPENDENCY # 2: LICENSE : BSD ---

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M
Apache	Commons Text 1.10.0	Apache Commons Text Copyright 2014-2020 The Apache Software Foundation Apache License, version 2.0 - See Appendix E --- commons-lang: 3.11 Apache Commons Lang Copyright 2001-2020 The Apache Software Foundation

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Apache Software Foundation	CXF 3.4.4 CXF 3..5	********** ********** Copied from BA Public License ********** ---------- Top-level license ---------- Apache CXF is licensed under Apache 2.0. Appendix E ========== ========== . . . ---------- Copyright notices ---------- This product also includes schemas and specification developed by or submitted to: - the W3C consortium (http://www.w3c.org) (http://www.w3.org/XML/1998/namespace) This product also includes WS-* schemas developed by International Business Machines Corporation, Microsoft Corporation, BEA Systems, TIBCO Software, SAP AG, Sonic Software, and VeriSign (http://schemas.xmlsoap.org/wsdl/2003-02-11.xsd) (http://schemas.xmlsoap.org/ws/2004/08/addressing/) (http://schemas.xmlsoap.org/wsdl/http) (http://schemas.xmlsoap.org/ws/2005/02/rm/wsrm.xsd) (http://www.w3.org/2005/08/addressing/ws-addr.xsd) (http://www.w3.org/TR/ws-metadata-exchange/) (http://schemas.xmlsoap.org/ws/2004/09/mex/) (http://docs.oasis-open.org/ws-sx/ws-trust/v1.4/ws-trust.html) The product contains code (StaxBuilder.java) that is Copyright (C) 2000-2004 Jason Hunter & Brett McLaughlin. All rights reserved. See the NOTICE.jdom file for additional information Java classes (source and binary) under org.apache.cxf.jaxws.javaee are generated from schema available here: (http://java.sun.com/xml/ns/javaee/javaee_5.xsd) This Product also includes software developed by David Heinemeier Hansson. (http://dev.rubyonrails.org/browser/trunk/activesupport/lib/active_support/inflections.rb)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This product includes software Copyright University of Southampton IT Innovation Centre, 2009 (http://www.it-innovation.soton.ac.uk). Portions of the included XmlSchema library are Copyright 2006 International Business Machines Corp. Portions of the included xmlbeans library were originally based on the following: - software copyright (c) 2000-2003, BEA Systems, <http://www.bea.com/>. Portions of the file cxf-utils.js derives from code marked: This code was written by Tyler Akins and has been placed in the public domain. It would be nice if you left this header intact. Base64 code from Tyler Akins -- http://rumkin.com This project includes Public Suffix List copied from https://publicsuffix.org/list/effective_tld_names.dat licensed under the terms of the Mozilla Public License, v. 2.0 Full license text: <http://mozilla.org/MPL/2.0/> This product includes software from the Spring Framework, under the Apache License 2.0 This project includes Apache Ant. The <sync> task is based on code Copyright (c) 2002, Landmark Graphics Corp that has been kindly donated to the Apache Software Foundation. Additional copyright notices and license terms applicable are present in the licenses directory of this distribution. This product includes code from the Nimbus JOSE + JWT project, under the Apache license 2.0 (https://github.com/felx/nimbus-jose-jwt). Copyright 2012-2017, Connect2id Ltd. ========== ========== . . . 3PL From Pom.xml Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to you under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- 4PL apache org.apache.cxf:cxf-core:compile org.apache.cxf:cxf-rt-transports-http:compile org.apache.cxf:cxf-rt-security:compile org.apache.cxf:cxf-rt-frontend-jaxrs:compile org.apache.cxf:cxf-rt-rs-extension-providers:runtime org.apache.cxf:cxf-rt-security:runtime org.apache.cxf:cxf-core:runtime org.apache.cxf:cxf-rt-transports-http:runtime org.apache.cxf:cxf-rt-frontend-jaxrs:runtime org.apache.cxf:cxf-rt-frontend-jaxws:runtime org.apache.cxf:cxf-rt-frontend-simple:runtime org.apache.cxf:cxf-rt-bindings-xml:runtime org.apache.cxf:cxf-rt-ws-addr:runtime org.apache.cxf:cxf-rt-wsdl:runtime org.apache.cxf:cxf-rt-ws-policy:runtime org.apache.cxf:cxf-rt-bindings-soap:runtime org.apache.cxf:cxf-rt-databinding-jaxb:runtime ---------- ========== 4PL : org.ow2.asm:asm ---------- ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. 3. Neither the name of the copyright holders nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ========== ========== 4PL : org.codehaus.jettison:jettison : ---------- Copyright 2006 Envoi Solutions LLC Licensed under the Apache License, Version 2.0 (the "License");

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== 4PL : jakarta.annotation:jakarta.annotation-api ---------- Eclipse Public License - v 2.0 ---------- See Appendix M CLASSPATH EXCEPTION ---------- Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License version 2 cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		do so. If you do not wish to do so, delete this exception statement from your version. ========== ========== jakarta.ws.rs:jakarta.ws.rs-api ---------- Eclipse Public License - v 2.0 ---------- See Appendix M CLASSPATH EXCEPTION ---------- Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License version 2 cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version. ========== ========== 4PL : org.glassfish.jaxb: jaxb-runtime 4PL : org.glassfish.jaxb: txw2 From Pom.xml <!--

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2013, 2021 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Distribution License v. 1.0, which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: BSD-3-Clause --> Eclipse Distribution License - v 1.0 ---------- EPL License 1.0, refer Appendix J ========== 4PL com.sun.activation :jakarta.activation Copyright (c) 2018 Oracle and/or its affiliates. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: - Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. - Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. - Neither the name of the Eclipse Foundation, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ========== 4PL com.fasterxml.woodstox:woodstox-core Apache License Version 2.0, January 2004 Apache License, version 2.0 - See Appendix E ========== ---------- 4PL jakarta.xml.bind:jakarta.xml.bind-api Notices for Jakarta XML Binding This content is produced and maintained by the Jakarta XML Binding project. Project home: https://projects.eclipse.org/projects/ee4j.jaxb Trademarks Jakarta XML Binding is a trademark of the Eclipse Foundation. Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Distribution License v. 1.0 which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: BSD-3-Clause Source Code The project maintains the following source code repositories:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		https://github.com/eclipse-ee4j/jaxb-api https://github.com/eclipse-ee4j/jaxb-tck Third-party Content This project leverages the following third party content. Apache River (3.0.0) License: Apache-2.0 AND BSD-3-Clause ASM 7 (n/a) License: BSD-3-Clause Project: https://asm.ow2.io/ Source: https://repository.ow2.org/nexus/#nexus-search;gav~org.ow2.asm~asm-commons~~~~kw,versionexpand JTHarness (5.0) License: (GPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0) Project: https://wiki.openjdk.java.net/display/CodeTools/JT+Harness Source: http://hg.openjdk.java.net/code-tools/jtharness/ normalize.css (3.0.2) License: MIT SigTest (n/a) License: GPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 EDL 1.0 Copyright (c) 2007, Eclipse Foundation, Inc. and its licensors. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. Neither the name of the Eclipse Foundation, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ========== ========== --- --- 4PL jakarta.activation:jakarta.activation-api Notices for Jakarta Activation This content is produced and maintained by Jakarta Activation project. Project home: https://projects.eclipse.org/projects/ee4j.jaf Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Distribution License v. 1.0, which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: BSD-3-Clause Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/jaf Copyright (c) 2018 Oracle and/or its affiliates. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: - Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. - Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. - Neither the name of the Eclipse Foundation, Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ========== ========== Notices for Eclipse Jetty ========== This content is produced and maintained by the Eclipse Jetty project.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Project home: https://www.eclipse.org/jetty/ Trademarks ---------- Eclipse Jetty, and Jetty are trademarks of the Eclipse Foundation. Copyright --------- All contributions are the property of the respective authors or of entities to which copyright has been assigned by the authors (eg. employer). Declared Project Licenses ------------------------- This artifacts of this project are made available under the terms of: * the Eclipse Public License v2.0 https://www.eclipse.org/legal/epl-2.0 SPDX-License-Identifier: EPL-2.0 or * the Apache License, Version 2.0 https://www.apache.org/licenses/LICENSE-2.0 SPDX-License-Identifier: Apache-2.0 The following dependencies are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following dependencies are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message The following dependencies are EPL and CDDL 1.0. * org.eclipse.jetty.orbit:javax.mail.glassfish The following dependencies are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html * org.ow2.asm:asm-commons * org.ow2.asm:asm The following dependencies are ASL2 licensed. * org.apache.taglibs:taglibs-standard-spec * org.apache.taglibs:taglibs-standard-impl The following dependencies are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. * org.mortbay.jasper:apache-jsp * org.apache.tomcat:tomcat-jasper * org.apache.tomcat:tomcat-juli * org.apache.tomcat:tomcat-jsp-api * org.apache.tomcat:tomcat-el-api * org.apache.tomcat:tomcat-jasper-el

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* org.apache.tomcat:tomcat-api * org.apache.tomcat:tomcat-util-scan * org.apache.tomcat:tomcat-util * org.mortbay.jasper:apache-el * org.apache.tomcat:tomcat-jasper-el * org.apache.tomcat:tomcat-el-api * org.eclipse.jetty.toolchain:jetty-schemas ==========xml-resolver========== License By obtaining and/or copying this work, you (the licensee) agree that you have read, understood, and will comply with the following terms and conditions. Permission to copy, modify, and distribute this work, with or without modification, for any purpose and without fee or royalty is hereby granted, provided that you include the following on ALL copies of the work or portions thereof, including modifications: * The full text of this NOTICE in a location viewable to users of the redistributed or derivative work. * Any pre-existing intellectual property disclaimers, notices, or terms and conditions. If none exist, the W3C Software and Document Short Notice should be included. * Notice of any changes or modifications, through a copyright statement on the new code or document such as "This software or document includes material copied from or derived from [title and URI of the W3C document]. Copyright © [YEAR] W3C® (MIT, ERCIM, Keio, Beihang)." Disclaimers THIS WORK IS PROVIDED "AS IS," AND COPYRIGHT HOLDERS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE OR DOCUMENT WILL NOT INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS. COPYRIGHT HOLDERS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SOFTWARE OR DOCUMENT. The name and trademarks of copyright holders may NOT be used in advertising or publicity pertaining to the work without specific, written prior permission. Title to copyright in this work will at all times remain with copyright holders. ==========xmlschema-core========== ***Copyright (C) World Wide Web Consortium 2006, 2007*** They are made available under the terms of the W3C DOCUMENT NOTICE AND LICENSE, available online at http://www.w3.org/Consortium/Legal/copyright-documents-19990405.html
Brian Wellington	dnsjava 3.5.1	Copyright (c) 1998-2011, Brian Wellington. All rights reserved. See Appendix M Copyright <YEAR> <COPYRIGHT HOLDER> See Appendix G
Open Web Application Security Project (OWASP)	Enterprise Security API (ESAPI) 2.5.1.0	-- Top Level License for ESAPI --- BSD 2-clause Copyright (c) 2013, ESAPI All rights reserved. BSD License and JSON License Creative Commons Attribution License, Attribution 2.5
MetaStuff, Ltd.	dom4j 2.1.3	

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
JBoss	Drools 7.32.0.Final	Apache License, version 2.0 - See Appendix E 4th party: ---------- poi-ooxml 3.17 poi 3.17 The Apache Software License, Version 2.0 http://www.apache.org/licenses/LICENSE-2.0.txt Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to You under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== */ ---------- drools-core 7.32.0.Final drools-compiler 7.32.0.Final drools-templates 7.32.0.Final The Apache Software License, Version 2.0 http://www.apache.org/licenses/LICENSE-2.0.txt /* * Copyright 2015 Red Hat, Inc. and/or its affiliates. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * * http://www.apache.org/licenses/LICENSE-2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- --- kie-api 7.32.0.Final kie-internal 7.32.0.Final The Apache Software License, Version 2.0 http://www.apache.org/licenses/LICENSE-2.0.txt /* * Copyright 2010 Red Hat, Inc. and/or its affiliates. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- --- slf4j-api 1.7.26 MIT License http://www.opensource.org/licenses/mit-license.php Begin license text. Copyright <YEAR> <COPYRIGHT HOLDER> See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- -- com.thoughtworks.xstream » xstream 1.4.11.1 /* * Copyright (C) 2006, 2007, 2008, 2009, 2010, 2011 XStream Committers. * All rights reserved. * * The software in this package is published under the terms of the BSD * style license a copy of which has been included with this distribution in * the LICENSE.txt file. * * Created on 15. March 2007 by Joerg Schaible */ (BSD Style License) Copyright (c) 2003-2006, Joe Walnes Copyright (c) 2006-2020, XStream Committers All rights reserved. See Appendix M ---------- ---------- ---------- Provided 4th Party: org.osgi.core 4.3.1 org.osgi.compendium 4.3.1 Apache License, Version 2.0 http://opensource.org/licenses/apache2.0.php

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
JBoss	Drools 7.67.0 Final	Top Level: Drools 7.67.0.Final (drools-decisiontables 7.67.0.Final) Apache License, version 2.0 - See Appendix E 4th party: ---------- ---------- ----- -----Dependency poi-ooxml poi 4.1.2 -----Notice Apache POI Copyright 2003-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). This product contains parts that were originally based on software from BEA. Copyright (c) 2000-2003, BEA Systems, (dead link), which was acquired by Oracle Corporation in 2008. This product contains W3C XML Schema documents. Copyright 2001-2003 (c) World Wide Web Consortium (Massachusetts Institute of Technology, European Research Consortium for Informatics and Mathematics, Keio University) This product contains the chunks_parse_cmds.tbl file from the vsdump program. Copyright (C) 2006-2007 Valek Filippov (frob@df.ru) This product contains parts of the eID Applet project and . Copyright (c) 2009-2014 FedICT (federal ICT department of Belgium), e-Contract.be BVBA (https://www.e-contract.be), Bart Hanssens from FedICT ----license Apache License, version 2.0 - See Appendix E APACHE POI SUBCOMPONENTS: Apache POI includes subcomponents with separate copyright notices and license terms. Your use of these subcomponents is subject to the terms and conditions of the following licenses:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Office Open XML schemas (ooxml-schemas-1.*.jar) The Office Open XML schema definitions used by Apache POI are a part of the Office Open XML ECMA Specification (ECMA-376, [1]). As defined in section 9.4 of the ECMA bylaws [2], this specification is available to all interested parties without restriction: 9.4 All documents when approved shall be made available to all interested parties without restriction. Furthermore, both Microsoft and Adobe have granted patent licenses to this work [3,4,5]. [1] http://www.ecma-international.org/publications/standards/Ecma-376.htm [2] http://www.ecma-international.org/memento/Ecmabylaws.htm [3] http://www.microsoft.com/openspecifications/en/us/programs/osp/default.aspx [4] http://www.ecma-international.org/publications/files/ECMA-ST/Ecma%20PATENT/ Patent%20statements%20ok/ECMA-376%20Edition%202%20Microsoft%20Patent%20Declaration.pdf [5] http://www.ecma-international.org/publications/files/ECMA-ST/Ecma%20PATENT/ Patent%20statements%20ok/ECMA-376%20Adobe%20Patent%20Declaration.pdf Bouncy Castle library (bcprov-*.jar, bcpg-*.jar, bcpkix-*.jar) See Appendix G JUnit test library (junit-4.*.jar) & JaCoCo (*jacoco*) Eclipse Public License - v 1.0 See Appendix J Hamcrest library (hamcrest-*.jar) & CuvesAPI / Curve API BSD License Copyright (c) 2000-2006, www.hamcrest.org All rights reserved. See Appendix M SLF4J library (slf4j-api-*.jar) Copyright (c) 2004-2013 QOS.ch All rights reserved. See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		inbot-utils (https://github.com/Inbot/inbot-utils) MIT License See Appendix G ========== ========== */ --- --- drools-core 7.67.0.Final drools-compiler 7.67.0.Final drools-templates 7.67.0.Final drools-core-reflective 7.67.0.Final drools-core-dynamic 7.67.0.Final drools-ecj 7.67.0.Final drools-mvel 7.67.0.Final The Apache Software License, Version 2.0 http://www.apache.org/licenses/LICENSE-2.0.txt /* * Copyright 2015 Red Hat, Inc. and/or its affiliates. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- --- --- --- ---Dependecy slf4j-api MIT License http://www.opensource.org/licenses/mit-license.php Begin license text.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		/** * Copyright (c) 2004-2011 QOS.ch * All rights reserved. * See Appendix G * */ --- --- --- -------Dependecy com.thoughtworks.xstream -------LICENSE (BSD Style License) Copyright (c) 2003-2006, Joe Walnes Copyright (c) 2006-2019, XStream Committers All rights reserved. See Appendix M --- --- --- Dependency io.github.x-stream:mxparser ----License https://raw.githubusercontent.com/x-stream/mxparser/master/LICENSE.txt Indiana University Extreme! Lab Software License, Version 1.2 Copyright (C) 2003 The Trustees of Indiana University. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1) All redistributions of source code must retain the above copyright notice, the list of authors in the original source code, this list of conditions and the disclaimer listed in this license; 2) All redistributions in binary form must reproduce the above

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		copyright notice, this list of conditions and the disclaimer listed in this license in the documentation and/or other materials provided with the distribution; 3) Any documentation included with all redistributions must include the following acknowledgement: "This product includes software developed by the Indiana University Extreme! Lab. For further information please visit http://www.extreme.indiana.edu/" Alternatively, this acknowledgment may appear in the software itself, and wherever such third-party acknowledgments normally appear. 4) The name "Indiana University" or "Indiana University Extreme! Lab" shall not be used to endorse or promote products derived from this software without prior written permission from Indiana University. For written permission, please contact http://www.extreme.indiana.edu/. 5) Products derived from this software may not use "Indiana University" name nor may "Indiana University" appear in their name, without prior written permission of the Indiana University. Indiana University provides no reassurances that the source code provided does not infringe the patent or any other intellectual property rights of any other entity. Indiana University disclaims any liability to any recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. LICENSEE UNDERSTANDS THAT SOFTWARE IS PROVIDED "AS IS" FOR WHICH NO WARRANTIES AS TO CAPABILITIES OR ACCURACY ARE MADE. INDIANA UNIVERSITY GIVES NO WARRANTIES AND MAKES NO REPRESENTATION THAT SOFTWARE IS FREE OF INFRINGEMENT OF THIRD PARTY PATENT, COPYRIGHT, OR

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		OTHER PROPRIETARY RIGHTS. INDIANA UNIVERSITY MAKES NO WARRANTIES THAT SOFTWARE IS FREE FROM "BUGS", "VIRUSES", "TROJAN HORSES", "TRAP DOORS", "WORMS", OR OTHER HARMFUL CODE. LICENSEE ASSUMES THE ENTIRE RISK AS TO THE PERFORMANCE OF SOFTWARE AND/OR ASSOCIATED MATERIALS, AND TO THE PERFORMANCE AND VALIDITY OF INFORMATION GENERATED USING SOFTWARE. ---------- ---------- ---------- ---------- ----Dependency xmlpull:xmlpull ---LICENSE http://www.xmlpull.org/v1/download/unpacked/LICENSE.txt XMLPULL API IS FREE ---------- All of the XMLPULL API source code, compiled code, and documentation contained in this distribution *except* for tests (see separate LICENSE_TESTS.txt) are in the Public Domain. XMLPULL API comes with NO WARRANTY or guarantee of fitness for any purpose. Initial authors: Stefan Haustein Aleksander Slominski 2001-12-12 ---------- ---------- ---------- ---------- ---------- Dependencies Grouped by License ---------- -------- Dependency jakarta.activation.jakarta.activation-api ----Notice Notices for Jakarta Activation

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This content is produced and maintained by Jakarta Activation project. Project home: https://projects.eclipse.org/projects/ee4j.jaf Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Distribution License v. 1.0, which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: BSD-3-Clause Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/jaf Third-party Content This project leverages the following third party content. JUnit (4.12) License: Eclipse Public License http://www.eclipse.org/org/documents/edl-v10.php Copyright (c) 2007, Eclipse Foundation, Inc. and its licensors. All rights reserved. See Appendix M -------- Dependency jakarta.xml.bind.jakarta.xml.bind-api -----Notice Notices for Jakarta XML Binding This content is produced and maintained by the Jakarta XML Binding project. Project home: https://projects.eclipse.org/projects/ee4j.jaxb Trademarks Jakarta XML Binding is a trademark of the Eclipse Foundation. Copyright All content is the property of the respective authors or their employers. For more information regarding

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Distribution License v. 1.0 which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: BSD-3-Clause Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/jaxb-api https://github.com/eclipse-ee4j/jaxb-tck Third-party Content This project leverages the following third party content. Apache River (3.0.0) License: Apache-2.0 AND BSD-3-Clause ASM 7 (n/a) License: BSD-3-Clause Project: https://asm.ow2.io/ Source: https://repository.ow2.org/nexus/#nexus-search;gav~org.ow2.asm~asm-commons~~~~kw,versionexpand JTHarness (5.0) License: (GPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0) Project: https://wiki.openjdk.java.net/display/CodeTools/JT+Harness Source: http://hg.openjdk.java.net/code-tools/jtharness/ normalize.css (3.0.2) License: MIT SigTest (n/a) License: GPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. -------- Dependency jakarta.inject-api

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		------Notice Notices for Eclipse Jakarta Dependency Injection This content is produced and maintained by the Eclipse Jakarta Dependency Injection project. Project home: https://projects.eclipse.org/projects/cdi.batch Trademarks Jakarta Dependency Injection is a trademark of the Eclipse Foundation. Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Apache License, Version 2.0 which is available at https://www.apache.org/licenses/LICENSE-2.0. SPDX-License-Identifier: Apache-2.0 Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/injection-api https://github.com/eclipse-ee4j/injection-spec https://github.com/eclipse-ee4j/injection-tck Third-party Content This project leverages the following third party content. None Cryptography None ---License Copyright (c) 2018 Oracle and/or its affiliates. All rights reserved. See Appendix M ---------- ---------- -- ---------- ---------- --- --Dependecy rg.antlr:antlr-runtime --LICENSE

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		[The "BSD 3-clause license"] Copyright (c) 2012-2017 The ANTLR Project. All rights reserved. See Appendix M ===== MIT License for codepointat.js from https://git.io/codepointat MIT License for fromcodepoint.js from https://git.io/vDW1m Copyright Mathias Bynens See Appendix G --- --- --- --- --- --- ---- Dependencies Grouped by License ---- ----Dependency jakarta.ejb-api ----Notice Notices for Jakarta Enterprise Beans This content is produced and maintained by the Jakarta Enterprise Beans project. Project home: https://projects.eclipse.org/projects/ee4j.ejb Trademarks Jakarta Enterprise Beans is a trademark of the Eclipse Foundation. Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/ejb-api Third-party Content Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ----Dependency jakarta.jms-api ----Notice Notices for the Jakarta Messaging project This content is produced and maintained by the Jakarta Messaging project. Project home: https://projects.eclipse.org/projects/ee4j.messaging Trademarks Eclipse Project for JMS is a trademark of the Eclipse Foundation. Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Source Code

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The project maintains the following source code repositories: https://github.com/eclipse-ee4j/messaging https://github.com/eclipse-ee4j/messaging-propsals Third-party Content Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ----Dependency jakarta.transaction-api ----Notice Notices for Jakarta Transactions This content is produced and maintained by the Jakarta Transactions project. Project home: https://projects.eclipse.org/projects/ee4j.jta Trademarks Jakarta Transactions is a trademark of the Eclipse Foundation. Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/jta-api

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Third-party Content This project leverages the following third party content. None Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ----Dependency jakarta.el-api ----------Notice Notices for Jakarta Expression Language This content is produced and maintained by the Jakarta Expression Language project. Project home: https://projects.eclipse.org/projects/ee4j.el Trademarks Jakarta Expression Language is a trademark of the Eclipse Foundation. Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/el-ri Third-party Content

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. --------Dependency jakarta.interceptor-api --------Notice Notices for Eclipse Project for Interceptors This content is produced and maintained by the Eclipse Project for Interceptors project. Project home: https://projects.eclipse.org/projects/ee4j.interceptors Trademarks Eclipse Project for Interceptors is a trademark of the Eclipse Foundation. Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/interceptor-api Third-party Content Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. --------Dependency jakarta.annotation-api ------Notice Notices for Jakarta Annotations This content is produced and maintained by the Jakarta Annotations project. Project home: https://projects.eclipse.org/projects/ee4j.ca Trademarks Jakarta Annotations is a trademark of the Eclipse Foundation. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/common-annotations-api Third-party Content Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ----------License Eclipse Public License - v 1.0 See Appendix J ---------- Dependencies Grouped by License ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---Dependency kie-api kie-internal kie-soup-maven-support kie-soup-xstream kie-memory-compiler kie-soup-project-datamodel-commons kie-soup-commons kie-soup-project-datamodel-api ---Dependency org.osgi.core org.osgi.compendium ----Dependecy commons-codec.commons-codec -------- Notices Apache Commons Codec Copyright 2002-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). src/test/org/apache/commons/codec/language/DoubleMetaphoneTest.java contains test data from http://aspell.net/test/orig/batch0.tab. Copyright (C) 2002 Kevin Atkinson (kevina@gnu.org) ----Dependency jakarta.enterprise.cdi-api ------Dependency commons-collections4 ------Notice Apache Commons Collections Copyright 2001-2019 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ------Dependency commons-math3 ------Notice Apache Commons Math Copyright 2001-2022 The Apache Software Foundation This product includes software developed at

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The Apache Software Foundation (http://www.apache.org/). This product includes software developed for Orekit by CS Systèmes d'Information (http://www.c-s.fr/) Copyright 2010-2012 CS Systèmes d'Information ------Dependency xmlbeans ------Notice ========== == NOTICE file corresponding to section 4(d) of the Apache License, == == Version 2.0, in this case for the Apache XmlBeans distribution. == ========== This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Portions of this software were originally based on the following: - software copyright (c) 2000-2003, BEA Systems, . Aside from contributions to the Apache XMLBeans project, this software also includes: - one or more source files from the Apache Xerces-J and Apache Axis products, Copyright (c) 1999-2003 Apache Software Foundation - W3C XML Schema documents Copyright 2001-2003 (c) World Wide Web Consortium (Massachusetts Institute of Technology, European Research Consortium for Informatics and Mathematics, Keio University) - resolver.jar from Apache Xml Commons project, Copyright (c) 2001-2003 Apache Software Foundation ------Dependency commons-compress ------Notice Apache Commons Compress Copyright 2002-2019 The Apache Software Foundation This product includes software developed at

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The Apache Software Foundation (https://www.apache.org/). The files in the package org.apache.commons.compress.archivers.sevenz were derived from the LZMA SDK, version 9.20 (C/ and CPP/7zip/), which has been placed in the public domain: "LZMA SDK is placed in the public domain." (http://www.7-zip.org/sdk.html) ------Dependency mvel2 SparseBitSet -----License https://www.apache.org/licenses/LICENSE-2.0.txt Apache License, version 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Coda Hale	DropWizard Metrics 4.1.10.1	dropwizard-metrics 4.0.5 COPYRIGHT: Copyright 2010-2013 Coda Hale and Yammer, Inc., 2014-2017 Dropwizard Team LICENSE:Apache 2.0 Apache License, version 2.0 - See Appendix E ========== Modules: docs metrics-bom metrics-annotation metrics-benchmarks metrics-core metrics-healthchecks metrics-ehcache metrics-graphite metrics-httpclient metrics-httpasyncclient metrics-jcache metrics-jdbi metrics-jdbi3 metrics-jersey2 metrics-jetty9 metrics-json metrics-jvm metrics-log4j2 metrics-logback metrics-servlet metrics-servlets metrics-jcstress metrics-jmx ========== Notice File: This product includes code derived from the JSR-166 project (ThreadLocalRandom, Striped64, LongAdder), which was released with the following comments: Written by Doug Lea with assistance from members of JCP JSR-166 Expert Group and released to the public domain, as explained at http://creativecommons.org/publicdomain/zero/1.0/ ========== Dependencies:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.slf4j 1.7.25 COPYRIGHT and LICENSE: Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G --- assertj 3.6.2 COPYRIGHT: Copyright 2012-2018 the original author or authors. Apache License, version 2.0 - See Appendix E https://github.com/joel-costigliola/assertj-core/blob/master/LICENSE.md --- mockito 2.7.12 COPYRIGHT and LICENSE: MIT License See Appendix G --- com.fasterxml.jackson.core » jackson-databind 2.9.5 COPYRIGHT: (c) fasterxml and Tatu Saloranta, tatu.saloranta@iki.fi: author LICENSE: Apache 2.0 http://www.apache.org/licenses/LICENSE-2.0 --- com.rabbitmq » amqp-client 4.4.1 COPYRIGHT: Copyright (c) 2007-Present Pivotal Software, Inc. All rights reserved. LICENSE: GNU GPL v2.0 + Apache 2.0 + MPL v1.1 This package, the RabbitMQ Java client library, is triple-licensed under the Mozilla Public License 1.1 ("MPL"), the GNU General Public License version 2 ("GPL") and the Apache License version 2 ("ASL"). For the MPL, please see LICENSE-MPL-RabbitMQ. For the GPL, please see LICENSE-GPL2. For the ASL, please see LICENSE-APACHE2. The RabbitMQ Java client library includes third-party software under the ASL. For this license, please see LICENSE-APACHE2. For attribution of copyright and other details of provenance, please refer to the source code. If you have any questions regarding licensing, please contact us at info@rabbitmq.com. Apache 2.0 https://github.com/rabbitmq/rabbitmq-java-client/blob/v4.4.1/LICENSE-APACHE2 ========== GNU General Public License, Version 2 (GPL-2.1) - See Appendix B ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Mozilla Public License Version 1.1 - See Appendix S --- com.papertrail » profiler 1.0.2 COPYRIGHT and LICENSE: Copyright 2015 Papertrail, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- org.eclipse.jetty » jetty-server 9.4.14.v20181114 LICENSE: EPL v1.0 + Apache 2.0 This program and the accompanying materials are made available under the terms of the Eclipse Public License 2.0 which is available at http://www.eclipse.org/legal/epl-2.0, or the Apache Software License 2.0 which is available at https://www.apache.org/licenses/LICENSE-2.0. Eclipse Public License - v 1.0 See Appendix J Apache License, version 2.0 - See Appendix E ========== Notice file: ========== Jetty Web Container Copyright 1995-2019 Mort Bay Consulting Pty Ltd. ========== The Jetty Web Container is Copyright Mort Bay Consulting Pty Ltd unless otherwise noted. Jetty is dual licensed under both * The Apache 2.0 License http://www.apache.org/licenses/LICENSE-2.0.html and * The Eclipse Public 1.0 License http://www.eclipse.org/legal/epl-v10.html Jetty may be distributed under either license. ------ Eclipse

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The following artifacts are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following artifacts are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message The following artifacts are EPL and CDDL 1.0. * org.eclipse.jetty.orbit:javax.mail.glassfish ------ Oracle The following artifacts are CDDL + GPLv2 with classpath exception. https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html * javax.servlet:javax.servlet-api * javax.annotation:javax.annotation-api * javax.transaction:javax.transaction-api * javax.websocket:javax.websocket-api ------ Oracle OpenJDK If ALPN is used to negotiate HTTP/2 connections, then the following artifacts may be included in the distribution or downloaded when ALPN module is selected. * java.sun.security.ssl These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions. http://openjdk.java.net/legal/gplv2+ce.html ------ OW2 The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html org.ow2.asm:asm-commons org.ow2.asm:asm ------ Apache The following artifacts are ASL2 licensed. org.apache.taglibs:taglibs-standard-spec org.apache.taglibs:taglibs-standard-impl ------ MortBay The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. org.mortbay.jasper:apache-jsp org.apache.tomcat:tomcat-jasper org.apache.tomcat:tomcat-juli

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.apache.tomcat:tomcat-jsp-api org.apache.tomcat:tomcat-el-api org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-api org.apache.tomcat:tomcat-util-scan org.apache.tomcat:tomcat-util org.mortbay.jasper:apache-el org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-el-api ------ Mortbay The following artifacts are CDDL + GPLv2 with classpath exception. https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html org.eclipse.jetty.toolchain:jetty-schemas ------ Assorted The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. --- ch.qos.logback » logback-classic 1.2.3 COPYRIGHT and LICENSE: Logback LICENSE --------------- Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2015, QOS.ch. All rights reserved. This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. LGPL v2.1 - See Appendix T ---- org.apache.httpcomponents » httpclient 4.5.5 COPYRIGHT: Copyright 1999-2018 The Apache Software Foundation LICENSE: Apache 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		https://github.com/apache/httpcomponents-client/blob/4.5.5/LICENSE.txt --- org.openjdk.jmh 1.19 No Copyright info LICENSE: GNU GPL v2.0 https://github.com/infynyxx/openjdk-jmh/blob/d5660790826189b3515083a270775f77a6378efc/jmh-core-it/LICENSE --- net.sf.ehcache » ehcache 2.10.4 COPYRIGHT: (c) © Terracotta, Inc LICENSE: Apache 2.0 http://www.ehcache.org/about/license.html --- apache httpasyncclient 4.1.3 COPYRIGHT: Copyright 2010-2017 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/httpasyncclient/blob/4.1.3/LICENSE.txt --- org.jdbi » jdbi 2.38.1 org.jdbi » jdbi3-core 3.0.0-rc1 COPYRIGHT: Copyright (C) 2004 - 2015 Brian McCallister LICENSE: Apache 2.0 https://github.com/jdbi/jdbi/blob/jdbi-2.38.1/LICENSE --- org.apache.logging.log4j » log4j-api 2.10.0 org.apache.logging.log4j » log4j-core 2.10.0 COPYRIGHT: Copyright 1999-2017 Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/logging-log4j2/blob/master/LICENSE.txt NOTICE: Apache Log4j Copyright 1999-2017 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma ---

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.openjdk.jcstress jcstress-core 0.1.1 No copyright info LICENSE: Apache 2.0 https://github.com/jwoschitz/jcstress-examples/blob/master/LICENSE

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Alibaba	fastjson 1.2.73 fastjson 1.2.83	Copyright 1999-2019 Alibaba Group Holding Ltd. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Apache License, version 2.0 - See Appendix E ++++4th party dependencies++++ com.squareup.retrofit2, v2.5.0, Apache 2.0 /* * Copyright (C) 2015 Square, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ++++++++++++++++ com.squareup.okhttp3, v3.6.0, Apache 2.0 /* * Copyright (C) 2012 Square, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ +++++++ jersey-common, v2.23.2, EPL v2.0 or GPL v2.0 /* * Copyright (c) 2013, 2019 Oracle and/or its affiliates. All rights reserved. * * This program and the accompanying materials are made available under the * terms of the Eclipse Public License v. 2.0, which is available at * http://www.eclipse.org/legal/epl-2.0. * * This Source Code may also be made available under the following Secondary * Licenses when the conditions for such availability set forth in the * Eclipse Public License v. 2.0 are satisfied: GNU General Public License, * version 2 with the GNU Classpath Exception, which is available at * https://www.gnu.org/software/classpath/license.html. * * SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 */ Eclipse Public License - v 2.0 - See Appendix Y +++++++++ joda-time, v2.10, Apache 2.0 /* * Copyright 2001-2014 Stephen Colebourne * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ++++++++++ protobuf-java, v3.11.0, BSD license Copyright 2008 Google Inc. All rights reserved. See Appendix M Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license. +++++++++

Eli Grey	file-saver 2.0.5	`https://github.com/eligrey/FileSaver.js/blob/master/LICENSE.md`
		
		`---------separator---------`
		
		MIT License See Appendix G
		
		`---------separator---------`

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Pallets Team	Flask 2.0.2	Top Level Component: Flask ---------- Top level Copyright: ---------- Copyright 2010 Pallets ---------- Top level component license: BSD-3-clause ---------- License Text: ---------- See Appendix M ---------- DEPENDENCIES ---------- 1. click: Copyright 2014 Pallets 2. itsdangerous: Copyright 2011 Pallets 3. Jinja2: Copyright 2007 Pallets 4. MarkupSafe: Copyright 2010 Pallets 5. Werkzeug: Copyright 2007 Pallets All 5 dependencies using the same license as the top component: BSD-3-clause. See license text above.
Mozilla	geckodriver 0.31.0	Mozilla Public License, version 2.0 - See Appendix R
Free Software Foundation	gnu tar 1.30-5	GNU GENERAL PUBLIC LICENSE 3.0 - See Appendix E
Google	GSON 2.8.6	Google Gson APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Google	GSON 2.8.8	Google Gson APACHE 2.0 - See Appendix E Copyright (C) 2008 Google Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2009 Google Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2010 Google Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2011 Google Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2012 Google Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2014

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Google Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2015 Google Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2016 The Gson Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2016 Google Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2017 The Gson authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2017 Google Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2018 The Gson authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.
Google	Guava 27.0.1	Copyright (C) 2008 The Guava Authors APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Google	Guava 28.1	Copyright (C) 2008 The Guava Authors APACHE 2.0 - See Appendix E ========== Modules: guava-bom guava-gwt guava-testlib guava-tests guava refactorings util ========== 4P Dependencies: com.google.code.findbugs » jsr305 3.0.2 COPYRIGHT: (C) University of Maryland LICENSE: The JSR-305 reference implementation (lib/jsr305.jar) is distributed under the terms of the New BSD license: http://www.opensource.org/licenses/bsd-license.php See the JSR-305 home page for more information: http://code.google.com/p/jsr-305/ See Appendix M -- com.google.errorprone » error_prone_annotations 2.3.0 COPYRIGHT: Copyright 2017 The Error Prone Authors. LICENSE: Apache 2.0 https://github.com/google/error-prone/blob/v2.2.0/COPYING --- -- com.google.guava » failureaccess 1.0.1 (part of google guava 28.1-jre. same license and copyright) --- com.google.guava » listenablefuture 9999.0-empty-... (part of google guava 28.1-jre. same license and copyright) --- com.google.j2objc » j2objc-annotations 1.3 COPYRIGHT: (C) Daniel Connelly and Google, Inc. LICENSE: Apache 2.0 https://github.com/google/j2objc/blob/1.1/LICENSE --- org.checkerframework » checker-qual 2.8.1, MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== javaparser 3.14.14 Copyright (C) 2007-2010 Júlio Vilmar Gesser. Copyright (C) 2011, 2013-2016 The JavaParser Team. JavaParser is available either under the terms of the LGPL 3 License or the Apache 2.0 License. You as the user are entitled to choose the terms under which to adopt JavaParser. ========== org.codehaus.mojo » animal-sniffer-annotations 1.18 Copyright (c) 2009 codehaus.org. MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Google	Guava 29.0 Guava 30.0	Copyright (C) 2012 The Guava Authors APACHE 2.0 - See Appendix E ++++++++++++++++++++++++ 4th party dependencies ++++++++++++++++++++++++++++ com.google.code.findbugs:jsr305:3.0.2 Copyright (c) 2007-2009, JSR305 expert group All rights reserved. See Appendix M ++++++++++++++++++ checker-qual, v2.11.1 Checker Framework qualifiers Copyright 2004-present by the Checker Framework developers MIT License See Appendix G © 2020 GitHub, Inc. ++++++++++++++++++ error_prone_annotations, v2.3.4 Copyright 2014 The Error Prone Authors. APACHE 2.0 - See Appendix E ++++++++++++ j2objc-annotations, v1.3 Copyright 2011 Google Inc. All Rights Reserved. APACHE 2.0 - See Appendix E ++++++++++++ listenablefuture, v9999.0-empty-to-avoid-conflict-with-guava Copyright 2011 Google Inc. All Rights Reserved. APACHE 2.0 - See Appendix E ++++++++++++++++ failureaccess, v1.0.1 Copyright 2011 Google Inc. All Rights Reserved. APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Google	Guava 30.1.1	--- Guava 30.1.1 Copyright (C) 2020 The Guava Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. APACHE 2.0 - See Appendix E ========== +--- 4th party: com.google.guava:listenablefuture Copyright (C) 2018 The Guava Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. < Apache License Version 2.0> ========== +--- 4th party: com.google.code.findbugs:jsr305 The JSR-305 reference implementation (lib/jsr305.jar) is distributed under the terms of the New BSD license: http://www.opensource.org/licenses/bsd-license.php See the JSR-305 home page for more information: http://code.google.com/p/jsr-305/ See Appendix M ========== +--- 4th party: jcip-annotations Copyright (c) 2005, Brian Goetz and Tim Peierls See Appendix M ========== +--- 4th party: com.google.errorprone:error_prone_annotations Copyright 2015 The Error Prone Authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. < Apache License Version 2.0>

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== +--- 4th party: com.google.j2objc:j2objc-annotations Google Inc. Daniel Connelly Copyright 2012 Google Inc. All Rights Reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/ LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. < Apache License Version 2.0> ========== ========== +--- 4th party: org.checkerframework:checker-qual Copyright 2004-present by the Checker Framework developers MIT License See Appendix G --- 4th party: org.codehaus.mojo:animal-sniffer-annotations Copyright (c) 2009 codehaus.org.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Benoît Chesneau	gunicorn 20.0.4	Gunicorn 2009-2018 (c) Benoît Chesneau <benoitc@e-engura.org> 2009-2015 (c) Paul J. Davis <paul.joseph.davis@gmail.com> Gunicorn is released under the MIT license. See the LICENSE file for the complete license. gunicorn.logging_config ---------- Copyright 2001-2005 by Vinay Sajip. All Rights Reserved. Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Vinay Sajip not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. VINAY SAJIP DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDINGALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL VINAY SAJIP BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. gunicorn.debug ---------- Based on eventlet.debug module under MIT license: Unless otherwise noted, the files in Eventlet are under the following MIT License See Appendix G gunicorn.reloader ---------- Based on greins.reloader module under MIT license: 2010 (c) Meebo, Inc. MIT License See Appendix G doc/sitemap_gen.py ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Under BSD License : Copyright (c) 2004, 2005, Google Inc. All rights reserved. See Appendix M util/unlink.py ---------- backport frop python3 Lib/test/support.py gunicorn/selectors.py ---------- Copyright (c) 2001-2016 Python Software Foundation; All Rights Reserved PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2 ---------- 1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001-2016 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee. 3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python. 4. PSF is making Python available to Licensee on an "AS IS" basis.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Benoît Chesneau	gunicorn 20.1.0	NOTICE Gunicorn 2009-2018 (c) Benoît Chesneau 2009-2015 (c) Paul J. Davis Gunicorn is released under the MIT license. See the LICENSE file for the complete license. gunicorn.logging_config ---------- Copyright 2001-2005 by Vinay Sajip. All Rights Reserved. Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Vinay Sajip not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. VINAY SAJIP DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL VINAY SAJIP BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. gunicorn.debug ---------- Based on eventlet.debug module under MIT license: Unless otherwise noted, the files in Eventlet are under the following MIT license: Copyright (c) 2005-2006, Bob Ippolito Copyright (c) 2007-2010, Linden Research, Inc. Copyright (c) 2008-2010, Eventlet Contributors (see Eventlet AUTHORS) See Appendix G gunicorn.reloader ---------- Based on greins.reloader module under MIT

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		license: 2010 (c) Meebo, Inc. MIT License See Appendix G doc/sitemap_gen.py ---------- Under BSD License : Copyright (c) 2004, 2005, Google Inc. All rights reserved. See Appendix M util/unlink.py ---------- backport frop python3 Lib/test/support.py LICENSE 2009-2018 (c) Benoît Chesneau 2009-2015 (c) Paul J. Davis See Appendix G setuptools 41.2.0 Could not find SSL_CERTIFICATE env variable Could not find SSL_KEY env variable Copyright (C) 2016 Jason R Coombs See Appendix G ---------- setproctitle 1.1.10 Copyright (c) 2009-2016, Daniele Varrazzo All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
hapijs	hapi 20.2.1	Copyright (c) 2011-2020, Sideway Inc, and project contributors Copyright (c) 2011-2014, Walmart Copyright (c) 2011, Yahoo Inc. All rights reserved. See Appendix M * * * The complete list of contributors can be found at: https://github.com/hapijs/hapi/graphs/contributors Portions of this project were initially based on the Yahoo! Inc. Postmile project, published at https://github.com/yahoo/postmile. ========== Below are 4th party depencencies ========== ++++++++++++++++++++++++++ wreck, v17.0.0, BSD-style license Copyright (c) 2012-2017, Project contributors Copyright (c) 2012-2014, Walmart All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ topo, v5.0.0, BSD-style license Copyright (c) 2014-2016, Project contributors Copyright (c) 2014, Walmart All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ teamwork, v4.0.0, BSD-style license Copyright (c) 2015-2017, Eran Hammer and Project contributors All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ subtext, v7.0.3, BSD-style license statehood, v7.0.2, BSD-style license shot, v5.0.0, BSD-Style license mimos, v5.0.0, BSD-Style license call, v8.0.0, BSD-style license ammo, v5.0.1, BSD-style license Copyright (c) 2014-2017, Project contributors Copyright (c) 2014, Walmart All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ podium, v4.0.0, BSD-style license Copyright (c) 2016-2017, Project contributors All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See Appendix M ++++++++++++++++++++++++++++++++++ joi, v17.0.0, BSD-style license Copyright (c) 2014-2018, Project contributors Copyright (c) 2014, Walmart All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ hoek, v9.0.0, BSD-style license Copyright (c) 2011-2017, Project contributors Copyright (c) 2011-2014, Walmart Copyright (c) 2011, Yahoo Inc. All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ heavy, v7.0.0, BSD-style license Copyright (c) 2013-2017, Project contributors Copyright (c) 2013-2014, Walmart All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ catbox-memory, v5.0.0, BSD-style license catbox, v11.1.0, BSD-style license Copyright (c) 2012-2018, Project contributors Copyright (c) 2012-2014, Walmart All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ bounce, v2.0.0, BSD-style license Copyright (c) 2017, Project contributors. All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ boom, v9.0.0, BSD-style license Copyright (c) 2012-2017, Project contributors. Copyright (c) 2012-2014, Walmart. All rights reserved. See Appendix M ++++++++++++++++++++++++++++++++++ accept, v5.0.1, BSD-style license Copyright (c) 2014-2017, Project contributors. Copyright (c) 2015-2016, Mark Bradshaw Copyright (c) 2014, Walmart. All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Willy Tarreau	HAproxy 2.3.10	HAPROXY's license - 2006/06/15 Historically, haproxy has been covered by GPL version 2. However, an issue appeared in GPL which will prevent external non-GPL code from being built using the headers provided with haproxy. My long-term goal is to build a core system able to load external modules to support specific application protocols. Since some protocols are found in rare environments (finance, industry, ...), some of them might be accessible only after signing an NDA. Enforcing GPL on such modules would only prevent them from ever being implemented, while not providing anything useful to ordinary users. For this reason, I *want* to be able to support binary only external modules when needed, with a GPL core and GPL modules for standard protocols, so that people fixing bugs don't keep them secretly to try to stay over competition. The solution was then to apply the LGPL license to the exportable include files, while keeping the GPL for all the rest. This way, it still is mandatory to redistribute modified code under customer request, but at the same time, it is expressly permitted to write, compile, link and load non-GPL code using the LGPL header files and not to distribute them if it causes a legal problem. Of course, users are strongly encouraged to continue the work under GPL as long as possible, since this license has allowed useful enhancements, contributions and fixes from talented people around the world. Due to the incompatibility between the GPL and the OpenSSL licence, you must apply the GPL/LGPL licence with the following exception: This program is released under the GPL with the additional exemption that compiling, linking, and/or using OpenSSL is allowed. The text of the licenses lies in the "doc" directory. All the files provided in this package are covered by the GPL unless expressly stated otherwise in them. Every patch or contribution provided by external people will by default comply with the license of the files it affects, or be rejected. Willy Tarreau - w@1wt.eu . . . ---------- (separator)---------- GNU General Public License, Version 2 (GPL v2) - See Appendix A ---------- (separator)---------- GNU General Public License, Version 2 (GPL-2.1) - See Appendix B ---------- (separator)---------- . . . ---------- Copyright notices ---------- Copyright 2000-2010 Willy Tarreau Copyright (C) 2019 HAProxy Technologies, Christopher Faulet Copyright 2019 HAProxy Technologies, Frédéric Lécaille Copyright 2012 Exceliance, David Du Colombier Copyright 2018 Joyent, Inc. Copyright 2014 Baptiste Assmann Copyright (C) 2020 HAProxy

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Technologies, William Lallemand Copyright 2020 HAProxy Technologies, Emeric Brun Copyright 2009-2010 Krzysztof Piotr Oledzki Copyright 2019 HAProxy Technologies, Olivier Houchard Copyright (C) 2009-2015, Linus Torvalds and others. Copyright 2021 Tim Duesterhus Copyright (c) 2018-2020 Cesanta Software Limited Copyright 2015 Horms Solutions Ltd, Simon Horman Copyright 2020 Gaetan Rivet Copyright 2015-2016 Thierry Fournier Copyright (C) 2011-2012 EXCELIANCE Copyright (C) 2017 Christopher Fauet - cfaulet@haproxy.com Copyright (C) 2015 Thierry FOURNIER Copyright 2019 Fr?d?ric L?caille Copyright (C) 2014 Tamas Kovacs, Sarkozi Laszlo, Krisztian Kovacs Copyright (C) 2012-2020 Yann Collet Copyright (C) 2017 HAProxy Technologies Copyright 1998 Gerald Combs Copyright 2020 HAProxy Technologies, Daniel Corbett
Hazelcast	Hazelcast Discovery Plugin for Kubernetes 2.1	APACHE 2.0 - See Appendix E Copyright (c) 2008-2018, Hazelcast, Inc. All Rights Reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.
The Kubernetes Authors	helm 3.1.2	APACHE 2.0 - See Appendix E Copyright 2016 The Kubernetes Authors All Rights Reserved Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Zaxxer.com	HikariCP 3.4.5	Copyright (C) 2013, 2014 Brett Wooldridge APACHE 2.0 - See Appendix E Below 4th party dependency ---------- SLF4j 1.7.25, MIT License See Appendix G SLF4J source code and binaries are distributed under the MIT license. Copyright (c) 2004-2013 QOS.ch All rights reserved. MIT - See Appendix G
Zaxxer.com	HikariCP 5.0.1	Copyright (C) 2013, 2019 Brett Wooldridge APACHE 2.0 - See Appendix E Below 4th party dependency ---------- SLF4j 1.7.25, MIT license SLF4J source code and binaries are distributed under the MIT license. Copyright (c) 2004-2019 QOS.ch All rights reserved. MIT - See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Apache Software Foundation	HttpAsyncClient 4.1.4	Apache Httpasyncclient 4.1.4 Apache HttpComponents AsyncClient Copyright 2010-2017 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). LICENSE: Apache 2.0 APACHE 2.0 - See Appendix E 4P Dependencies: ========== This project contains annotations derived from JCIP-ANNOTATIONS NOTICE FILE: Copyright (c) 2005, Brian Goetz and Tim Peierls See Appendix M POM FILE: commons-logging 1.2 Apache Commons Logging Copyright 2003-2016 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). --- org.apache.httpcomponents » httpcore 4.4.10 Apache HttpComponents Core Copyright 2005-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). --- org.apache.httpcomponents » httpcore-nio 4.4.10 Apache HttpComponents Core Copyright 2005-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). --- org.apache.httpcomponents » httpclient 4.5.6 Apache HttpComponents Client Copyright 1999-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). --- commons-codec 1.1.0 Apache Commons Codec Copyright 2002-2014 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). src/test/org/apache/commons/codec/language/DoubleMetaphoneTest.java contains

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		test data from http://aspell.net/test/orig/ batch0.tab. Copyright (C) 2002 Kevin Atkinson (kevina@gnu.org) ========== ========== The content of package org.apache.commons.codec.language.bm has been translated from the original php source code available at http://stevemorse.org/phoneticinfo.htm with permission from the original authors. Original source copyright: Copyright (c) 2008 Alexander Beider & Stephen P. Morse.
Apache	Httpclient 4.5.7	Apache httpclient 4.5.7 Copyright 1999-2019 The Apache Software Foundation APACHE 2.0 - See Appendix E --- This project includes Public Suffix List copied from <https://publicsuffix.org/list/effective_tld_names.dat> licensed under the terms of the Mozilla Public License, v. 2.0 MPL 2.0 - See Appendix S --- 4 th -party Dependencies: commons-codec » commons-codec 1.11 COPYRIGHT: Copyright 2002-2014 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/commons-codec/blob/1.10/LICENSE.txt commons-logging » commons-logging 1.2 COPYRIGHT: Copyright 2003-2014 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/commons-logging/blob/LOGGING_1_2/LICENSE.txt org.apache.httpcomponents » httpcore 4.4.11 COPYRIGHT: Copyright 2005-2019 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/httpcomponents-core/blob/4.4.11/LICENSE.txt commons-codec » commons-codec 1.11 COPYRIGHT: Copyright 2002-2014 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/commons-codec/blob/commons-codec-1.11/LICENSE.txt

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Apache	Httpclient 4.5.10	Apache HttpComponents HttpClient 4.5.8 Copyright 1999-2019 The Apache Software Foundation APACHE 2.0 - See Appendix E --- Modules: ********** httpclient httpmime fluent-hc httpclient-cache httpclient-win httpclient-osgi --- 4 th -party Dependencies: commons-codec » commons-codec 1.11, commons-codec-1.12.jar COPYRIGHT: Copyright 2002-2017 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/commons-codec/blob/commons-codec-1.11/LICENSE.txt commons-logging » commons-logging 1.2 COPYRIGHT: Copyright 2003-2014 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/commons-logging/blob/LOGGING_1_2/LICENSE.txt org.apache.httpcomponents » httpcore 4.4.11 COPYRIGHT: Copyright 2005-2019 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/httpcomponents-core/blob/4.4.11/LICENSE.txt commons-lang3-3.9.jar Copyright © 2019 The Apache Software Foundation, Licensed under the Apache License, Version 2.0. LICENSE: Apache 2.0 https://github.com/apache/commons-logging/blob/LOGGING_1_2/LICENSE.txt This project includes Public Suffix List copied from <https://publicsuffix.org/list/effective_tld_names.dat> licensed under the terms of the Mozilla Public License, v. 2.0 MPL 2.0 - See Appendix S This Source Code Form is "Incompatible With Secondary Licenses", as defined by the Mozilla Public License, v. 2.0. ========== Fourth Party Dependency Name : ehcache-core Fourth Party Dependency License : Apache 2.0 Fourth Party Dependency Copyright : Copyright Ehcache V3 Copyright 2014-2016 Terracotta, Inc.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The product includes software from the Apache Commons Lang project, under the Apache License 2.0 (see: org.ehcache.impl.internal.classes.commonslang) ========== Fourth Party Dependency Name : slf4j-jcl Fourth Party Dependency License : MIT Fourth Party Dependency Copyright : Copyright Copyright (c) 2004-2017 QOS.ch All rights reserved. MIT - See Appendix G Fourth Party Dependency Name : spymemcached Fourth Party Dependency License : MIT Fourth Party Dependency Copyright : Copyright Copyright (c) 2006-2009 Dustin Sallings Copyright (c) 2009-2011 Couchbase, Inc. ========== Fourth Party Dependency Name : jna Fourth Party Dependency License : Apache 2.0 Fourth Party Dependency Copyright : Copyright Copyright (C) 1991, 1999 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== Fourth Party Dependency Name : docbook-xml Fourth Party Dependency License : Apache 2.0 Fourth Party Dependency Copyright : Copyright Copyright 2015 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Apache	Httpclient 4.5.12	Apache HttpComponents HttpClient 4.5.10 Copyright 1999-2019 The Apache Software Foundation APACHE 2.0 - See Appendix E --- Modules: ********** httpclient httpmime fluent-hc httpclient-cache httpclient-win httpclient-osgi --- 4P Dependencies: commons-codec » commons-codec 1.11, commons-codec-1.12.jar COPYRIGHT: Copyright 2002-2017 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/commons-codec/blob/commons-codec-1.11/LICENSE.txt commons-logging » commons-logging 1.2 COPYRIGHT: Copyright 2003-2014 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/commons-logging/blob/LOGGING_1_2/LICENSE.txt org.apache.httpcomponents » httpcore 4.4.11 COPYRIGHT: Copyright 2005-2019 The Apache Software Foundation LICENSE: Apache 2.0 https://github.com/apache/httpcomponents-core/blob/4.4.11/LICENSE.txt commons-lang3-3.9.jar Copyright © 2019 The Apache Software Foundation, Licensed under the Apache License, Version 2.0. LICENSE: Apache 2.0 https://github.com/apache/commons-logging/blob/LOGGING_1_2/LICENSE.txt This project includes Public Suffix List copied from <https://publicsuffix.org/list/effective_tld_names.dat> licensed under the terms of the Mozilla Public License, v. 2.0 MPL 2.0 - See Appendix S This Source Code Form is "Incompatible With Secondary Licenses", as defined by the Mozilla Public License, v. 2.0. ========== Fourth Party Dependency Name : ehcache-core Fourth Party Dependency License : Apache 2.0 Fourth Party Dependency Copyright : Copyright Ehcache V3 Copyright 2014-2016 Terracotta, Inc.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The product includes software from the Apache Commons Lang project, under the Apache License 2.0 (see: org.ehcache.impl.internal.classes.commonslang) ========== Fourth Party Dependency Name : slf4j-jcl Fourth Party Dependency License : MIT Fourth Party Dependency Copyright : Copyright Copyright (c) 2004-2017 QOS.ch All rights reserved. MIT - See Appendix G Fourth Party Dependency Name : spymemcached Fourth Party Dependency License : MIT Fourth Party Dependency Copyright : Copyright Copyright (c) 2006-2009 Dustin Sallings Copyright (c) 2009-2011 Couchbase, Inc. ========== Fourth Party Dependency Name : jna Fourth Party Dependency License : Apache 2.0 Fourth Party Dependency Copyright : Copyright Copyright (C) 1991, 1999 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== Fourth Party Dependency Name : docbook-xml Fourth Party Dependency License : Apache 2.0 Fourth Party Dependency Copyright : Copyright Copyright 2015 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== Fourth Party Dependency Name : docbook-xml Fourth Party Dependency License : Apache 2.0 Fourth Party Dependency Copyright : Copyright Copyright 2015 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Apache Software Foundation	HttpComponents HttpClient 4.5.13	Apache HttpComponents Client Copyright 1999-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). - See Appendix E --- This project includes Public Suffix List copied from <https://publicsuffix.org/list/effective_tld_names.dat> licensed under the terms of the Mozilla Public License, v. 2.0 - See Mozilla Public License (MPL), Version 2.0 ----------4th party dependencies---------- Apache HttpComponents Core From the Notice File: Apache HttpComponents Core Copyright 2005-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). - See Appendix E. Apache Commons Logging From the Notice File: Apache Commons Logging Copyright 2003-2014 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). - See Appendix E. Apache Commons Codec From the Notice File: Apache Commons Codec Copyright 2002-2017 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). - See Appendix E. src/test/org/apache/commons/codec/language/DoubleMetaphoneTest.java contains test data from http://aspell.net/test/orig/batch0.tab. Copyright (C) 2002 Kevin Atkinson (kevina@gnu.org) ========== ========== The content of package org.apache.commons.codec.language.bm has been

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		translated from the original php source code available at http://stevemorse.org/phoneticinfo.htm with permission from the original authors. Original source copyright: Copyright (c) 2008 Alexander Beider & Stephen P. Morse. License File: Apache License Version 2.0
Apache	HttpCore 4.4.13 HttpCore 4.4.14	Apache HttpComponents Core Copyright 2005-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). APACHE 2.0 - See Appendix E
The Apache Software Foundation	Commons Codec 1.15	APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Encode OSS Ltd	httpx 0.19.0 httpx 0.23.0	httpx 0.18.2 Copyright © 2019, Encode OSS Ltd. All rights reserved. See Appendix M -------- 4TH PARTY DEPENDENCIES --------- certifi 2021.5.30 This package contains a modified version of ca-bundle.crt: ca-bundle.crt -- Bundle of CA Root Certificates Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011# This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree: http://mxr.mozilla.org/mozilla/source/security/nss/lib/ckfw/builtins/certdata.txt?raw=1# It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php_curl, or with an Apache+mod_ssl webserver for SSL client authentication. Just configure this file as the SSLCACertificateFile.# ***** BEGIN LICENSE BLOCK ***** This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at http://mozilla.org/MPL/2.0/. ********** Mozilla Public License Version 2.0 - See Appendix S ********** ***** END LICENSE BLOCK ***** @(#) $RCSfile: certdata.txt,v $ $Revision: 1.80 $ $Date: 2011/11/03 15:11:58 $ ---------- ---------- httpcore 0.13.6 Copyright © 2020, Encode OSS Ltd. All rights reserved. See Appendix M ---------- ---------- sniffio 1.2.0 async_generator 1.10 NOTE:- "async_generator is used for python_version < '3.7'" but we use python 3.9.2 This software is made available under the terms of *either* of the licenses found in LICENSE.APACHE2 or LICENSE.MIT. Contributions to are made under the terms of *both* these licenses. ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Stefan Majer	influxdb-java 2.22	org.influxdb:influxdb-java MIT License See Appendix G The Apache Software Foundation (http://www.apache.org/). APACHE 2.0 - See Appendix E ---------- ---------- Dependencies: com.squareup.retrofit2:retrofit : Apache License : License[1] com.squareup.retrofit2:converter-moshi : Apache License : License[1] org.msgpack:msgpack-core : Apache License : License[1] com.squareup.moshi:moshi : Apache License : License[1] com.squareup.okhttp3:okhttp : Apache License : License[1] com.squareup.okio:okio : Apache License : License[1] org.jetbrains.kotlin:kotlin-stdlib-common : Apache License : License[1] org.jetbrains.kotlin:kotlin-stdlib: Apache License : License[1] org.jetbrains:annotations : Apache License : License[1] com.squareup.okhttp3:logging-interceptor : Apache License : License[1] org.jetbrains.kotlin:kotlin-stdlib-jdk8 : Apache License : License[1] org.jetbrains.kotlin:kotlin-stdlib-jdk7 : Apache License : License[1] ---------- ---------- com.squareup.retrofit2:retrofit COPYRIGHT Copyright 2022 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- ---------- com.squareup.retrofit2:converter-moshi COPYRIGHT Copyright 2022 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- ---------- com.squareup.moshi:moshi COPYRIGHT Copyright 2022 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		com.squareup.okhttp3:okhttp COPYRIGHT Copyright 2022 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- com.squareup.okio:okio:jar COPYRIGHT Copyright 2022 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- org.jetbrains.kotlin:kotlin-stdlib-common COPYRIGHT /* * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== == NOTICE file corresponding to the section 4 d of == == the Apache License, Version 2.0, == == in this case for the Kotlin Compiler distribution. == ========== Kotlin Compiler Copyright 2010-2020 JetBrains s.r.o and respective authors and developers --- org.msgpack:msgpack-core COPYRIGHT Copyright © 2008-2022 Sadayuki Furuhashi Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This product includes the software developed by third-party: * Google Guava https://code.google.com/p/guava-libraries/ (APL2) * sbt-extras: https://github.com/paulp/sbt-extras (BSD) (LICENSE.sbt-extras.txt) ---------- org.jetbrains.kotlin:kotlin-stdlib COPYRIGHT /* * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== == NOTICE file corresponding to the section 4 d of == == the Apache License, Version 2.0, == == in this case for the Kotlin Compiler distribution. == ========== Kotlin Compiler Copyright 2010-2020 JetBrains s.r.o and respective authors and developers ---------- org.jetbrains:annotations COPYRIGHT /*

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Copyright 2000-2021 JetBrains s.r.o. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- com.squareup.okhttp3:logging-interceptor COPYRIGHT Copyright 2022 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- org.jetbrains.kotlin:kotlin-stdlib-jdk8 COPYRIGHT /* * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors. * * Licensed under the Apache License, Version

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== == NOTICE file corresponding to the section 4 d of == == the Apache License, Version 2.0, == == in this case for the Kotlin Compiler distribution. == ========== Kotlin Compiler Copyright 2010-2020 JetBrains s.r.o and respective authors and developers --- org.jetbrains.kotlin:kotlin-stdlib-jdk7 COPYRIGHT /* * Copyright 2010-2022 JetBrains s.r.o. and Kotlin Programming Language contributors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== == NOTICE file corresponding to the section 4 d of == == the Apache License, Version 2.0, == == in this case for the Kotlin Compiler distribution. == ========== Kotlin Compiler Copyright 2010-2020 JetBrains s.r.o and respective authors and developers --- notice file msgpack : https://github.com/msgpack/msgpack-java/blob/master/NOTICE This project uses code from the ASF Apache Harmony project. The following are the relevant notices from that project, included in order to comply with its license requirements. --- Apache Harmony Copyright 2006, 2010 The Apache Software Foundation. This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Portions of Apache Harmony were originally developed by Intel Corporation and are licensed to the Apache Software Foundation under the "Software Grant and Corporate Contribution License Agreement" and for which the following copyright notices apply (C) Copyright 2005 Intel Corporation (C) Copyright 2005-2006 Intel Corporation

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(C) Copyright 2006 Intel Corporation Portions of Apache Harmony's Class Library TEXT module contain JavaDoc derived from the ICU project. Copyright (c) 1995-2008 International Business Machines Corporation and others The Apache Harmony Development Kit (HDK) contains a jar file from the Apache Derby Project for which the following notice applies: Apache Derby Copyright 2004-2007 The Apache Software Foundation This product includes software developed by The Apache Software Foundation (http:// www.apache.org/). Portions of Derby were originally developed by International Business Machines Corporation and are licensed to the Apache Software Foundation under the "Software Grant and Corporate Contribution License Agreement", informally known as the "Derby CLA". The following copyright notice(s) were affixed to portions of the code with which this file is now or was at one time distributed and are placed here unaltered. (C) Copyright 1997,2004 International Business Machines Corporation. All rights reserved. (C) Copyright IBM Corp. 2003. The portion of the functionTests under 'nist' was originally developed by the National Institute of Standards and Technology (NIST), an agency of the United States Department of Commerce, and adapted by International Business Machines Corporation in accordance with the NIST Software Acknowledgment and Redistribution document at http://www.itl.nist.gov/div897/ctg/sql_form.htm

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

Stefan Majer	influxdb-java 2.19	MIT License See Appendix G
seancfoley	ipaddress 5.2.1 ipaddress 5.3.3	TOP-LEVEL COPYRIGHT LICENSE for com.github.seancfoley:ipaddress:5.2.1 APACHE 2.0 - See Appendix E
FasterXML, LLC	jackson-annotations 2.10.2	Jackson Annotations 2.9.7 Copyright (c) 2007 Tatu Saloranta <tatu.saloranta@iki.fi> LICENSE: Apache 2.0 APACHE 2.0 - See Appendix E
FasterXML, LLC	jackson-annotations 2.11.0	Jackson Annotations Copyright (c) 2019 Tatu Saloranta <tatu.saloranta@iki.fi> LICENSE: Apache 2.0 APACHE 2.0 - See Appendix E
FasterXML, LLC	jackson-annotations 2.11.1	jackson-annotations 2.9.7 COPYRIGHT: Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi APACHE 2.0 - See Appendix E
FasterXML, LLC	jackson-core 2.10.0	Copyright © 2008–2019 FasterXML. All rights reserved. This copy of Jackson JSON processor streaming parser/ generator is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 APACHE 2.0 - See Appendix E COPYRIGHT NOTICE # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers, as well as supported commercially by FasterXML.com. ## Licensing Jackson core and extension components may licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (http://fasterxml.com). ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ---------- APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
FasterXML, LLC	jackson-core 2.10.2	jackson-core 2.9.7 COPYRIGHT: Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi LICENSE: Apache 2.0 APACHE 2.0 - See Appendix E
FasterXML, LLC	jackson-core 2.11.0	jackson-core 2.9.7 COPYRIGHT: Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi LICENSE: Apache 2.0 APACHE 2.0 - See Appendix E
FasterXML, LLC	jackson-core 2.11.1 jackson-core 2.11.2	jackson-core 2.9.7 COPYRIGHT: Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi APACHE 2.0 - See Appendix E
FasterXML, LLC	jackson-core 2.12.2 jackson-core 2.13.1	Jackson Core Copyright © 2008–2019 FasterXML. All rights reserved. This copy of Jackson JSON processor streaming parser/generator is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 NOTICE FILE: ========== # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers, as well as supported commercially by FasterXML.com. ## Licensing Jackson core and extension components may licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (http://fasterxml.com). ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ========== APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
FasterXML, LLC	jackson-databind 2.13.4.2	------------------------------ Top-level license ------------------------- APACHE 2.0 - See Appendix E ------------------------------ Copyright notices ------------------------- # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 2.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS(-2.x) file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ---------------------------- Fourth-party information ---------------------- == jackson-core == License Apache 2.0 == Copyright Notices Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Jackson 2.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS(-2.x) file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. --------------------------------- (separator)--------------------------------- == jackson-annotations == License Apache 2.0 == Copyright Notices Copyright © 2007-2022 FasterXML. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --------------------------------- (separator)---------------------------------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
FasterXML, LLC	jackson-dataformat-yaml 2.11.2	Dependency: com.fasterxml.jackson.dataformat:jackson-dataformat-yaml:jar:2.11.2 License: Apache 2.0 --- NOTICE FILE # JACKSON JSON PROCESSOR Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers, as well as supported commercially by FasterXML.com. # LICENSING Jackson core and extension components may be licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (http://fasterxml.com). # CREDITS A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. --- APACHE 2.0 - See Appendix E FOURTH-PARTY DEPENDENCY --- Dependency: com.fasterxml.jackson.core:jackson-databind:jar:2.11.2 LICENSE: Apache 2.0 --- Dependency: com.fasterxml.jackson.core:jackson-core:jar:2.11.2 LICENSE: Apache 2.0 --- Dependency: org.yaml:snakeyaml:jar:1.26 LICENSE: Apache 2.0 Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		express or implied. See the License for the specific language governing permissions and limitations under the License.
FasterXML, LLC	jackson-datatype-joda 2.9.6	APACHE 2.0 - See Appendix E Below are 4th party dependencies: jackson-annotations 2.9.0, Apache 2.0 jackson-core 2.9.6, Apache 2.0 jackson-databind 2.9.6, Apache 2.0 Above 3 softwares don't have copyright info in the source code, just license info of Apache 2.0 joda-time 2.7, Apache 2.0 NOTICE file corresponding to section 4d of the Apache License Version 2.0 This product includes software developed by Joda.org (http://www.joda.org/).
FasterXML, LLC	jackson-datatype-joda 2.11.0	jackson-datatype-joda 2.10.0 NOTICE file corresponding to section 4d of the Apache License Version 2.0 This product includes software developed by Joda.org (http://www.joda.org/). COPYRIGHT: Copyright 2007 Tatu Saloranta Copyright 2012 FasterXML.com APACHE 2.0 - See Appendix E 4th party dependencies: com.fasterxml.jackson.core jackson-core com.fasterxml.jackson.core jackson-databind com.fasterxml.jackson.core jackson-annotations COPYRIGHT: Copyright 2007 Tatu Saloranta Copyright 2012 FasterXML.com LICENSE: Apache 2.0 http://www.apache.org/licenses/LICENSE-2.0 joda-time COYRIGHT: Copyright 2001-2015 Stephen Colebourne LICENSE: Apache 2.0 http://www.apache.org/licenses/LICENSE-2.0 APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
FasterXML, LLC.	jackson-datatype-joda 2.13.1	NOTICE: # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers, as well as supported commercially by FasterXML.com. ## Licensing Jackson core and extension components may licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (http://fasterxml.com). ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ---------- NOTICE: # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers, as well as supported commercially by FasterXML.com. ## Licensing Jackson core and extension components may licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (http://fasterxml.com).

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. --- This copy of Jackson JSON processor streaming parser/ generator is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 --- APACHE 2.0 - See Appendix E --- jackson-datatype-joda NOTICE: ========== = NOTICE file corresponding to section 4d of the Apache License Version 2.0 = ========== This product includes software developed by Joda.org (http://www.joda.org/). ========== COPYRIGHT: Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi Copyright 2012 FasterXML.com APACHE 2.0 - See Appendix E --- joda-time COYRIGHT: Copyright 2001-2015 Stephen Colebourne APACHE 2.0 - See Appendix E --- Joda Convert COYRIGHT: Copyright 2001-2015 Stephen Colebourne

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2010-present Stephen Colebourne This product includes software developed by Joda.org (https://www.joda.org/). Joda-Convert includes code from Google Guava, which is licensed as follows: Copyright (C) 2011 The Guava Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
FasterXML, LLC.	jackson-datatype-joda 2.13.2	jackson-datatype-joda ---------- APACHE 2.0 - See Appendix E ---------- ---------- jackson-datatype-joda ---------- Apache License Version 2.0, January 2004 http://www.apache.org/ licenses/ Copyright /* * Copyright 2007-present the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ NOTICE This copy of Jackson JSON processor streaming parser/generator is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 ----------FOURTH

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		PARTY DEPENDENCY 1 -------------------- jackson-annotations ------------------- Apache License Version 2.0, January 2004 http://www.apache.org/ licenses/ Copyright /* * Copyright 2007-present the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ----------FOURTH PARTY DEPENDENCY 2 -------------------- jackson-core ------------------- Apache License Version 2.0, January 2004 http://www.apache.org/ licenses/ Copyright /* Jackson JSON-processor. * * Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi */ # Notice

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Project: jackson-core Contains core streaming reader (`JsonParser`) and writer (`JsonGenerator`) abstractions, factory for constructing readers/writers (JsonFactory), as well as a minimal set of interfaces needed for streaming level to make callbacks and call-throughs, via `ObjectCodec` and `TreeNode`. Also includes implementation of this API for JSON. Forms the base for other data formats as well, despite naming that suggests JSON-specificity: naming is due to history, as Jackson started out as pure JSON library. ## Licensing Jackson 2.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS(-2.x) file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ----------FOURTH PARTY DEPENDENCY 3 ---------- jackson-databind ---------- Apache License Version 2.0, January 2004 http://www.apache.org/ licenses/ Copyright /* * Copyright 2007-present the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Notices # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 2.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS(-2.x) file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ----------FOURTH PARTY DEPENDENCY 4 ---------- joda-time ---------- Apache License Version 2.0, January 2004 http://www.apache.org/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

		licenses/
		
		Copyright
		/*
		 * Copyright 2001-2015 Stephen Colebourne
		 *
		 * Licensed under the Apache License, Version 2.0 (the "License");
		 * you may not use this file except in compliance with the License.
		 * You may obtain a copy of the License at
		 *
		 * http://www.apache.org/licenses/LICENSE-2.0
		 *
		 * Unless required by applicable law or agreed to in writing, software
		 * distributed under the License is distributed on an "AS IS" BASIS,
		 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
		 * See the License for the specific language governing permissions and
		 * limitations under the License.
		 */
		
		==
		 = NOTICE file corresponding to section 4d of the Apache License Version 2.0 =
		
		==
		 This product includes software developed by Joda.org (https://www.joda.org/).
		-- 	
		
		joda-convert
		--------------------- 	
		Apache License
		                                 Version 2.0, January 2004
		                              http://www.apache.org/licenses/
		
		Copyright
		/*
		 * Copyright 2010-present Stephen Colebourne
		 *
		 * Licensed under the Apache License, Version 2.0 (the "License");

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ /* * Copied from Guava and altered. Original copyright: * * Copyright (C) 2012 The Guava Authors * * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except * in compliance with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software distributed under the License * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express * or implied. See the License for the specific language governing permissions and limitations under * the License. */
FasterXML, LLC	jackson-datatype-jsr310 2.11.0	jackson-datatype-jsr310 2.11.0 COPYRIGHT: [1] LICENSE: [3] Fourth party dependencies jackson-annotations 2.10.0 COPYRIGHT: [2] LICENSE: [3] Copyright 2013 FasterXML.com APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
FasterXML, LLC	jackson-datatype-jsr310 2.11.1	jackson-datatype-jsr310 2.11.0 COPYRIGHT: [1] LICENSE: [3] Fourth party dependencies jackson-annotations 2.10.0 COPYRIGHT: [2] LICENSE: [3] =====BEGIN REFERENCE [1]===== /* * Copyright 2013 FasterXML.com * * Licensed under the Apache License, Version 2.0 (the "License"); you may * not use this file except in compliance with the License. You may obtain * a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the license for the specific language governing permissions and * limitations under the license. */ =====END REFERENCE [1]===== =====BEGIN REFERENCE [2]===== This copy of Jackson JSON processor annotations is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 =====END REFERENCE [2]===== =====BEGIN REFERENCE [3]===== APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
youDevise, Ltd.	Java DogStatsD Client 2.10.2	java-statsd-client. Copyright (C) 2012 youDevise, Ltd. See Appendix G ++++++++++++++++ 4th party dependency ++++++++ +++++++++ jnr-unixsocket, v0.18, Apache 2.0 /* * Copyright (C) 2009 Wayne Meissner * * This file is part of the JNR project. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */
Tatu Saloranta	Java Uuid Generator 4.0.1	Java UUID Generator » 3.1.5 COPYRIGHT: Copyright (c) 2002- Tatu Saloranta, tatu.saloranta@iki.fi LICENSE: Apache 2.0 APACHE 2.0 - See Appendix E
Oracle	JCache Reference Implementation 1.1.1	JCache Reference Implementation 1.1.1 Terracotta and Oracle /** * Copyright 2011-2013 Terracotta, Inc. * Copyright 2011-2013 Oracle, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ APACHE 2.0 - See Appendix E cache-api 1.1.1 SUBCOMPONENTS Apache License 2.0 ---------- CDI APIs 2.0.SP1 Apache License 2.0 APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Eclipse Foundation	jersey-client 2.31	****DEVELOPMENT MUST INSERT THE INFORMATION IN THE SECTIONS BELOW****** The documentation team must include the following in the documentation accompanying the Oracle product that includes the EPL code: 1. The follow files are available in source code form under the Eclipse Public License at: {INSERT WEBSITE WHERE SOURCE CODE IS AVAILABLE}. (The EPL license is reproduced below). 2. All past Contributors to the {INSERT THE NAME OF THE EPL CODE} disclaim all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose. In addition, such Contributors are not liable for any damages, including direct, indirect, special, incidental and consequential damages, such as lost profits. 3. Any provisions of the Oracle license agreement that differ from the Eclipse Public License are offered by Oracle alone and not by any other party. 4. { IF THERE ARE MODIFICATIONS OR ADDITIONS, INSERT THE FOLLOWING} Oracle has modified the following files {LIST FILES} 5. { IF EXECUTABLES ARE UNDER ORACLE AGREEMENT AS OPPOSED TO THE EPL, INSERT THE FOLLOWING} These files are licensed in executable form under your Oracle license agreement. Oracle is solely responsible for any representations and warranties contained therein. jersey-core-client (org.glassfish.jersey.core:jersey-client) Copyright (c) 2018 Payara Foundation and/or its affiliates. All rights reserved. Copyright (c) 2018,2019 Payara Foundation and/or its affiliates. Copyright (c) 2010,2020 Oracle and/or its affiliates. All rights reserved. --- # Notice for Jersey This content is produced and maintained by the Eclipse Jersey project. * Project home: https://projects.eclipse.org/projects/ee4j.jersey ## Trademarks Eclipse Jersey is a trademark of the Eclipse Foundation. ## Copyright All content is the property of the respective authors or their employers. For

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		more information regarding authorship of content, please consult the listed source code repository logs. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. Oracle elects the EPL 2.0 license. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/jersey ---------- Eclipse Public License - v 2.0 - See Appendix Y GPL v2 - See Appendix A ---------- Fourth Party Dependencies ---------- "jakarta.ws.rs-api" (jakarta.ws.rs:jakarta.ws.rs-api) Copyright (c) 2010,2019 Oracle and/or its affiliates. All rights reserved. Copyright (c) 2006 Google Inc. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 ---------- "jersey-core-common" (org.glassfish.jersey.core:jersey-common) Copyright (c) 2007,2020 Oracle and/or its affiliates. All rights reserved. Copyright (c) 2018 Payara Foundation and/or its affiliates. Copyright (C) 2006,2014 The Guava Authors EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		"Jakarta Annotations API" (jakarta.annotation:jakarta.annotation-api) Copyright (c) 2005,2018 Oracle and/or its affiliates. All rights reserved. Copyright © 2019 Eclipse Foundation. All rights reserved. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "OSGi resource locator" (org.glassfish.hk2:osgi-resource-locator) Copyright (c) 2009,2018 Oracle and/or its affiliates. All rights reserved. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "javax.inject:1 as OSGi bundle" (org.glassfish.hk2.external:jakarta.inject) Copyright (C) 2009 The JSR-330 Expert Group Copyright (c) 2010,2018 Oracle and/or its affiliates. All rights reserved. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "Jakarta Activation" (com.sun.activation:jakarta.activation) Copyright (c) 1997,2019 Oracle and/or its affiliates. All rights reserved. Eclipse Distribution License - v 1.0 Copyright (c) 2007, Eclipse Foundation, Inc. and its licensors. All rights reserved. See Appendix M ---

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

Uber Technologies	jaeger-client-python 4.3.0	# Copyright (c) 2016-2018 Uber Technologies, Inc. # # Licensed under the Apache License, Version 2.0 (the "License"); # you may not use this file except in compliance with the License. # You may obtain a copy of the License at # # http://www.apache.org/licenses/LICENSE-2.0 # # Unless required by applicable law or agreed to in writing, software # distributed under the License is distributed on an "AS IS" BASIS, # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. # See the License for the specific language governing permissions and # limitations under the License.
		APACHE 2.0 - See Appendix E
		Below are 4th party dependencies go-swagger, 0.12.0, apache license // Copyright 2015 go-swagger maintainers // // Licensed under the Apache License, Version 2.0 (the "License"); // you may not use this file except in compliance with the License. // You may obtain a copy of the License at // // http://www.apache.org/licenses/LICENSE-2.0 // // Unless required by applicable law or agreed to in writing, software // distributed under the License is distributed on an "AS IS" BASIS, // WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. // See the License for the specific language governing permissions and // limitations under the License. ++++++++++++++++++++ ++ +++++++ thrift, 0.9.3, apache 2.0 Apache Thrift Copyright 2006-2017 The Apache Software Foundation. This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ++ ++++++++++++++++++++++++++ mockery, BSD-3-Clause Copyright (c) 2014, Opinionated Architecture All rights reserved.
		See Appendix M

Jenkins CI	jenkins 2.289.3	TOP-LEVEL COPYRIGHT NOTICE for jenkins -> 2.277.4 RELEASE ---------separator-------- MIT License See Appendix G ---------separator--------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Jenkins CI	Jenkins 2.319.2	Jenkins MIT License See Appendix G ========== ========== ========== Antlr Copyright (c) 2012-2017 The ANTLR Project. All rights reserved SOFTWARE RIGHTS ANTLR 1989-2004 Developed by Terence Parr Partially supported by University of San Francisco & jGuru.com We reserve no legal rights to the ANTLR--it is fully in the public domain. An individual or company may do whatever they wish with source code distributed with ANTLR or the code generated by ANTLR, including the incorporation of ANTLR, or its output, into commerical software. We encourage users to develop software with ANTLR. However, we do ask that credit is given to us for developing ANTLR. By "credit", we mean that if you use ANTLR or incorporate any source code into one of your programs (commercial product, research project, or otherwise) that you acknowledge this fact somewhere in the documentation, research report, etc... If you like ANTLR and have developed a nice tool with the output, please mention that you developed it using ANTLR. In addition, we ask that the headers remain intact in our source code. As long as these guidelines are kept, we expect to continue enhancing this system and expect to make other tools available as they are completed. The primary ANTLR guy: Terence Parr parrt@cs.usfca.edu parrt@antlr.org ========== ========== ========== jakarta.servlet.jsp.jstl-api is dual licensed under EPL and GPL+CPE:-

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright © 2019 Eclipse Foundation. All rights reserved Copyright 2004 The Apache Software Foundation Copyright (c) 1997-2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 1997, 2018 Oracle and/or its affiliates. All rights reserved Eclipse Public License - v 2.0 ========== Eclipse Public License - v 2.0 - See Appendix Y ISC License (ISCL) License:- jbcrypt Copyright (c) 2006 Damien Miller ========== Copyright (c) 4-digit year, Company or Person's Name Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. --- ========== ========== ========== = Indiana University Extreme! Lab Software License:- mxparser Copyright (c) 2003 Extreme Copyright (C) 2003 The Trustees of Indiana University. * All rights reserved

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2002 Extreme Indiana University Extreme! Lab Software License ========== Version 1.1.1 Copyright (c) 2002 Extreme! Lab, Indiana University. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. 3. The end-user documentation included with the redistribution, if any, must include the following acknowledgment: "This product includes software developed by the Indiana University Extreme! Lab (http://www.extreme.indiana.edu/)." Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear. 4. The names "Indiana Univeristy" and "Indiana Univeristy Extreme! Lab" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact http://www.extreme.indiana.edu/. 5. Products derived from this software may not use "Indiana Univeristy" name nor may "Indiana Univeristy" appear in their name, without prior written permission of the Indiana University. See Appendix M ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== = BSD 3-clause "New" or "Revised" License:- asm (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright jQuery Foundation and other contributors Copyright JS Foundation and other contributors Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved Copyright jQuery Foundation and other contributors; Licensed MIT Copyright (c) 2000-2011 INRIA, France Telecom// All rights reserved asm-analysis asm-commons (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright jQuery Foundation and other contributors Copyright JS Foundation and other contributors Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved Copyright jQuery Foundation and other contributors; Licensed MIT Copyright (c) 2000-2011 INRIA, France Telecom// All rights reserved asm-tree (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright jQuery Foundation and other contributors Copyright JS Foundation and other contributors Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved Copyright jQuery Foundation and other contributors; Licensed MIT Copyright (c) 2000-2011 INRIA, France Telecom// All rights reserved asm-util (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2000-2011 INRIA, * France Telecom All rights reserved Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright jQuery Foundation and other contributors Copyright JS Foundation and other contributors Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved Copyright jQuery Foundation and other contributors; Licensed MIT Copyright (c) 2000-2011 INRIA, France Telecom// All rights reserved dom4j (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved Copyright (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright JS Foundation and other contributors Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved Copyright 2001-2005 (C) MetaStuff, Ltd. All Rights Reserved jakarta.activation Copyright (c) 1997, 2018 Oracle and/or its affiliates. All rights reserved jenkins-stapler-support Copyright (C) 2011 by Daniel Glazman Copyright (c) 2011 souceLair Copyright (C) 2011 by MarkLogic Corporation Copyright (c) 2010 Timothy Farrell Copyright (c) 2011, Ubalo, Inc.All rights reserved Copyright (c) 2012 Codility Limited, 107 Cheapside, London EC2V 6DN, UK Copyright (C) 2011 by Sabaca under the MIT license. Copyright (c) 2011 Jeff Pickhardt Copyright (C) 2012 Thomas Schmid Jline jna Copyright (c) 2002-2016, the original author or authors. jzlib-kohsuke Copyright (c) 2000-2011 ymnk, JCraft,Inc. All rights reserved

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2000,2001,2002,2003 ymnk, JCraft,Inc. All rights reserved Copyright (c) 2011 ymnk, JCraft,Inc. All rights reserved relaxngDatatype Copyright 2013 FasterXML.com Copyright (c) , All rights reserved. See Appendix M ========== ========== ========== The MIT License:- access-modifier-annotation Copyright (c) 2010, Kohsuke Kawaguchi (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright jQuery Foundation and other contributors Copyright JS Foundation and other contributors Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved Copyright 2018 CloudBees, Inc. Copyright jQuery Foundation and other contributors; Licensed MIT Copyright 2017 CloudBees, Inc. annotation-indexer args4j Copyright (c) 2013 Kohsuke Kawaguchi and other contributors bridge-method-annotation Copyright (c) 2010, InfraDNA, Inc. cli Copyright (c) 2004-2009, Sun Microsystems, Inc. crypto-util Copyright (c) 2004-2009, Sun Microsystems, Inc. embedded_su4j instance-identity Copyright 2014 Amazon.com, Inc. or its affiliates. * All Rights Reserved Copyright (c) 1998-2010 AOL Inc. Copyright (c) 2016 Stephen Connolly

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		jenkins-core Copyright (c) 2004-2010, Sun Microsystems, Inc. j-interopdeps Copyright (C) 2004 The jTDS Project Copyright (C) 2001, 2002, 2003 Free Software Foundation, Inc. Copyright (C) 2001, 2002, Free Software Foundation, Inc. Copyright 2003, 2006 Eric Glass (eric.glass@gmail.com) * Copyright (C) 2002, 2003 Free Software Foundation, Inc. jnr-x86asm Copyright (c) 2008-2009, Petr Kobalicek Copyright (C) 2010 Wayne Meissner kxml2 Copyright (c) 2002,2003, Stefan Haustein, Oberhausen, Rhld., Germany Copyright (c) 2002,2003,2004 Stefan Haustein, Oberhausen, Rhld., Germany Copyright (c) 2002,2003, Stefan Haustein, Oberhausen, Rhld., Germany launchd-slave-installer Copyright (c) 2004-2012. All Rights Reserved libpam4j Copyright (c) 2009, Sun Microsystems, Inc. Copyright 2014, R. Tyler Croy, Sun Microsystems, Inc. Copyright 2011, Sun Microsystems, Inc. localizer Copyright (c) 2007-, the localizer project contributors mockito-core Copyright (c) 2007 Mockito contributors memory-monitor Copyright (c) 2008-2011, Sun Microsystems, Inc., Kohsuke Kawaguchi, Stephen Wolf Copyright (c) 2008-2011, Sun Microsystems, Inc., Kohsuke Kawaguchi remoting Copyright (c) 2013 Kohsuke Kawaguchi and other contributors Copyright (c) 2004-2010, Sun Microsystems, Inc., Kohsuke Kawaguchi, CloudBees, Inc.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2004-2010, Sun Microsystems, Inc., Kohsuke Kawaguchi Copyright (c) 2004-2018, Sun Microsystems, Inc., Kohsuke Kawaguchi, CloudBees, Inc. Copyright (c) 2016, Stephen Connolly, CloudBees, Inc., and others Copyright 2018 CloudBees, Inc. Copyright 2013 Jesse Glick. Copyright (c) 2010, InfraDNA, Inc. Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi, CloudBees, Inc. Copyright 1999-2002,2004 The Apache Software Foundation. Copyright (c) 2012, 2017 Oracle and/or its affiliates. All rights reserved Copyright (c) 2016- CloudBees, Inc. Copyright (c) 2016 CloudBees, Inc. Copyright (c) 2016, Stephen Connolly, CloudBees, Inc. Copyright (c) 2004-2016, Sun Microsystems, Inc., Kohsuke Kawaguchi, Daniel Dyer, Stephen Connolly, and others Copyright (c) 2011, CloudBees, Inc. Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi, Ullrich Hafner Copyright (c) 2016, CloudBees, Inc. Copyright (c) 2019, CloudBees, Inc. Copyright 2006-2008 Makoto YUI Copyright (c) 2017 CloudBees, Inc. Copyright (c) 2018, CloudBees, Inc. Copyright (c) 2004-2009, Sun Microsystems, Inc. Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi Copyright (c) 2016, CloudBees, Inc., Stephen Connolly robust-http-client Copyright (c) 2009, Sun Microsystems, Inc. self-signed-cert-generator Copyright (c) 2016 Stephen Connolly slave-installer Copyright © 2004-2014. All Rights Reserved slf4j-api Copyright (c) 2004-2011 QOS.ch slf4j-jdk14 Copyright (c) 2004-2011 QOS.ch The MIT License

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== Copyright (c) MIT License See Appendix G ========== ========== ========== = Eclipse Public License 2.0:- jakarta.mail Copyright (c) 2013, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 2009, 2020 Oracle and/or its affiliates. All rights reserved Copyright (c) 2015, 2018 Jason Mehrens. All rights reserved Copyright (c) 2009, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 2012, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 2014, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 2015, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 2009, 2020 Jason Mehrens. All rights reserved Copyright (c) 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 1997, 2020 Oracle and/or its affiliates. All rights reserved Copyright (c) 2013, 2018 Jason Mehrens. All rights reserved Copyright (c) 2013, 2019 Jason Mehrens. All rights reserved Copyright © 2017 Copyright (c) 2012, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 1997, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 2005, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 2008, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 2009, 2019 Jason Mehrens. All rights reserved Copyright (c) 2013, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 1997, 2018 Oracle and/or its affiliates. All rights reserved

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2010, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 2014, 2019 Oracle and/or its affiliates. All rights reserved Jnr-posix (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (C) 2007 Thomas E Enebo Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved Copyright jQuery Foundation and other contributors */; (function(factory) { if (type of define === "function" && define.amd) { (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright (C) 2007 Copyright jQuery Foundation and other contributors Copyright JS Foundation and other contributors Copyright (C) 2007 Charles O Nutter Copyright (C) 2008 JRuby Community Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved ========== ========== ========== GNU Lesser General Public License v2.1 or later:- jakarta.mail Copyright (c) 2013, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 2009, 2020 Oracle and/or its affiliates. All rights reserved Copyright (c) 2015, 2018 Jason Mehrens. All rights reserved Copyright (c) 2009, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 2012, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 2014, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 2015, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 2009, 2020 Jason Mehrens. All rights reserved Copyright (c) 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 1997, 2020 Oracle and/or its affiliates. All rights reserved

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2013, 2018 Jason Mehrens. All rights reserved Copyright (c) 2013, 2019 Jason Mehrens. All rights reserved Copyright © 2017 Copyright (c) 2012, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 1997, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 2005, 2019 Oracle and/or its affiliates. All rights reserved Copyright (c) 2008, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 2009, 2019 Jason Mehrens. All rights reserved Copyright (c) 2013, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 1997, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 2010, 2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 2014, 2019 Oracle and/or its affiliates. All rights reserved jcifs-1.3.18-kohsuke Copyright (C) 2006 "Michael B. Allen" Copyright (c) 1996 Widget Workshop, Inc. All Rights Reserved Copyright (c) 2003 Michael B. Allen Copyright (C) 2003 "Eric Glass" Copyright (C) 1996 by Wolfgang Platzer// email: wplatzer@iaik.tu-graz.ac.at//// All rights reserved Copyright (C) 2009 "Michael B. Allen" Copyright (C) 1996 by Jef Poskanzer . All rights reserved Copyright (C) 2004 "Michael B. Allen" Copyright (C) 2005 "Michael B. Allen" Copyright (C) 2008 "Michael B. Allen" Copyright (C) 2009 "Michael B Allen" Copyright (C) 2002 "Michael B. Allen" Copyright (c) 1997 Systemics Ltd * on behalf of the Cryptix Development Team. All rights reserved Copyright (C) 2007 "Michael B. Allen" Copyright (C) 2000 "Michael B. Allen" Copyright (C) 2003 "Michael B. Allen" jcommon

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(C) Copyright 2004, 2005, 2007, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; copyright; /** Other info about the application. private String info; /** The project logo. */ private Image logo; (C) Copyright 2004, 2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2004, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004, by Object Refinery Limited. * * Original Author: Thomas Morgner; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2001-2004, by Thomas Morgner. * * Original Author: Thomas Morgner; * Contributor(s): -; (C) Copyright 2003, by Thomas Morgner and Contributors. * * Original Author: Thomas Morgner; * Contributor(s): -; (C) Copyright 2003, 2004, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2003, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2013, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jcommon/index.html (C) Copyright 2001-2003, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2005, by Object Refinery Limited. * * Original Author: Peter Becker; * Contributor(s): -; (C) Copyright 2000-2004, by Andrzej Porebski. * * Original Author: Andrzej Porebski; * Contributor(s): -; (C) Copyright 2003-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2001-2006, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004, by Thomas Morgner and Contributors. * * Original Author: Thomas Morgner; * Contributor(s): David Gilbert (for Object Refinery Limited); Copyright © 2001 (C) Copyright 2000-2008, by Andrzej Porebski. * * Original Author: Andrzej Porebski; * Contributor(s): Arnaud Lelievre; (C) Copyright 2003-2011, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Limited); * Contributor(s): Ryan Hirrlinger (Patch 2999449); (C) Copyright 2000-2005, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jcommon/index.html (C) Copyright 2000-2006, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; copyright the project copyright statement. */ copyright a copyright statement. * @param licenceName the name of the licence that applies to the project. * @param licenceText the text of the licence that applies to the project. (C) Copyright 2000-2005, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2006, by Object Refinery Limited. */ (C) Copyright 2003-2005, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; copyright = copyright; } (C) Copyright 2002, 2003, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; Copyright(copyright); } (C) Copyright 2003-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2005, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Arik Levin; (C) Copyright 2004-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Brian Fischer; (C) Copyright 2000-2011, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jcommon/index.html (C) Copyright 2003-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2004, by Nobuo Tamemasa and Contributors. * * Original Author: Nobuo Tamemasa; * Contributor(s): David Gilbert (for Object Refinery Limited); * Gareth D (C) Copyright 2000-2008, by Andrzej Porebski and Contributors. * * Original Author: Andrzej Porebski; * Contributor(s): David Gilbert (for Object Refinery Limited); * Arna

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(C) Copyright 2000-2006, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jcommon/index.html (C) Copyright 2001-2005, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; copyright the copyright statement. (C) Copyright 2000-2007, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jcommon/index.html (C) Copyright 2000-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2009, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jcommon/index.html (C) Copyright 2002-2004, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Polish translation: Krzysztof Paz (kpaz@samorzad.pw.edu.pl); * Fix (C) Copyright 2000-2008, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jcommon/index.html (C) Copyright 2003-2007, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; Copyright()); result.append(".\n"); result.append("\n"); result.append("For terms of use, see the licence below.\n"); result.append("\n"); result.append("F (C) Copyright 2001-2004, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004, 2005, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2004, by Object Refinery Limited. * * Original Author: Thomas Meier; * Contributor(s): David Gilbert (for Object Refinery Limited); Copyright(resources.getString("project.copyright")); setLicenceName("LGPL"); setLicenceText(Licences.getInstance().getLGPL()); copyright the copyright statement. * @param info other info. * @param logo an optional logo. */ public AboutPanel(final String application, final Strin (C) Copyright 2002-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; Copyright (C) 1991, 1999 Free Software Foundation, Inc.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		copyright = copyright; this.info = info; this.logo = logo; this.contributors = contributors; this.licence = licence; final String baseName = "org.jfree.u (C) Copyright 2000-2011, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jcommon/index.html (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jcommon/index.html (C) Copyright 2001-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; copyright the copyright statement. * @param info other info. */ public AboutPanel(final String application, final String version, final (C) Copyright 2000-2005, by Object Refinery Limited; * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2003-2005, by Object Refinery Limited and Contributors. * * Original Author: Thomas Morgner; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003-2005, by Thomas Morgner and Contributors. * * Original Author: Thomas Morgner; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2000-2004, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Dirk Zeitz; (C) Copyright 2002-2004, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Hans-Jurgen Greiner; (C) Copyright 2002-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2004, by Nobuo Tamemasa and Contributors. * * Original Author: Nobuo Tamemasa; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2000-2005, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Jon Iles; Copyright (C) 2013 David Gilbert

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(C) Copyright 2002-2011, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2004, by Nabuo Tamemasa and Contributors. * * Original Author: Nabuo Tamemasa; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003, 2004, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2005, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2003, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2005, by Object Refinery Limited. * * Original Author: Thomas Morgner; * Contributor(s): -; copyright the copyright notice. * @param licence the licence. * @param contributors a list of developers/ contributors. * @param project info about the project. */ publ Copyright (C) 1989, 1991 Free Software Foundation, Inc., (C) Copyright 2000-2004, by Object Refinery Limited and Contributors. * * Original Author: Christian W. Zuckschwerdt; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2002-2005, by Object Refinery Limited. * * Original Author: Thomas Morgner (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2006, by Object Refinery Limited. * * Original Author: Thomas Morgner; * Contributor(s): -; (C) Copyright 2003, 2004, by Bryan Scott (for Australian Antarctic Division). * * Original Author: Bryan Scott (for Australian Antarctic Division); * Contributor(s): David Gilbert (for Object (C) Copyright 2000-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Arnaud Lelievre; (C) Copyright 2002-2005, by Thomas Morgner and Contributors. * * Original Author: Thomas Morgner; * Contributor(s): -; (C) Copyright 2004, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2006, by Object Refinery Limited and Contributors. (C) Copyright 2003, by Thomas Morgner and Contributors. * * Original Author: Thomas Morgner; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2000-2005, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jcommon/index.html (C) Copyright 2002-2005, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004, 2005, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; copyright; /** A list of libraries used by the project. private List libraries; private List optionalLibraries; Copyright(info.getCopyright()); setLicenceName(info.getLicenceName()); setLicenceText(info.getLicenceText()); (C) Copyright 2001-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; Copyright(final String copyright) copyright string. copyright the copyright notice. * @param licence the licence. * @param contributors a list of developers/contributors. * @param libraries a list of libraries. */ priva jfreechart (C) Copyright 2001-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Richard Atkinson; * C (C) Copyright 2002-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Alex Weber; (C) Copyright 2000-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Arnaud Lelievre; * Daniel Gredler; (C) Copyright 2003-2014, by David Browning and Contributors. * * Original Author: David Browning (for the Australian Institute of Marine * Science); * Contributor(s): David Gi (C) Copyright 2002-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2809117);

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(C) Copyright 2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limtied); * Contributor(s): Christoph Beck (bug 2121818); (C) Copyright 2006-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2001-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Sam (oldman); (C) Copyright 2005-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Nicolas Brodu; (C) Copyright 2007-2011, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Andrew Mickish; * Pet (C) Copyright 2003-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2007, 2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2001-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Aimin Han; (C) Copyright 2000-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Nicolas Brodu; (C) Copyright 2002-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Andreas Schroeder; (C) Copyright 2003-2013, by Jelai Wang and Contributors. * * Original Author: Jelai Wang (jelaiw AT mindspring.com); * Contributor(s): David Gilbert (for Object Refinery Limited); * (C) Copyright 2003-2012, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2013, by the Australian Antarctic Division and * Contributors. * * Original Author: Bryan Scott (for the Australian Antarctic Division); * Contributor(s): David Gilbert ((C) Copyright 2011-2014 by DaveLaw and Contributors. * * Original Author: DaveLaw (dave ATT davelaw D0TT de); * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2002-2009, by Pascal Collet and Contributors. * * Original Author: Pascal Collet; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

		Contributor(s): David Gilbert (for Object Refinery Limited);
		Copyright(resources.getString("project.copyright")); setLogo(null); // load only when required setLicenceName("LGPL"); setLicenceText(Licences.getInstance().getLGPL());
		(C) Copyright 2002-2014, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributors: David Gilbert (for Object Refinery Limited); * Clel
		(C) Copyright 2004-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Pierre-Marie Le Biot;
		(C) Copyright 2007-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -;
		(C) Copyright 2000-2013, by Object Refinery and Contributors. * * Original Author: Tomer Peretz; * Contributor(s): Richard Atkinson; * David Gilbert (for Object Refinery L
		(C) Copyright 2001-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Richard Atkinson; * Christian W. Z
		(C) Copyright 2004-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -;
		(C) Copyright 2003-2009, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributors: David Gilbert (for Object Refinery Limited); * Fawa
		(C) Copyright 2007, 2008, by David Forslund and Contributors. * * Original Author: David Forslund; * Contributor(s): David Gilbert (for Object Refinery Limited);
		(C) Copyright 2007, 2008 by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -;
		(C) Copyright 2002-2014, by David M. O * * Original Author: David M. O'Donnell; * Contributor(s): David Gilbert (for Object Refinery Limited); * Arnaud Lelievre; *
		(C) Copyright 2000-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Laurence Vanhelsuwe; *
		(C) Copyright 2001-2009, by Bill Kelemen and Contributors. * * Original Author: Bill Kelemen; * Contributor(s): Sylvain Vieujot; * David Gilbert (for Object Refinery Limit
		(C) Copyright 2003-2014, by Paolo Cova and Contributors. * * Original Author: Paolo Cova; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): David Gilbert (for Object Refinery Limited); * Christian W. Zuc (C) Copyright 2001-2009, by Object Refinery Limited and Contributors. * * Original Author: Mark Watson (www.markwatson.com); * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2009-2013, by Object Refinery Limited and Contributors. * * Original Author: Peter Kolb; * Contributor(s): ; (C) Copyright 2001-2011, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Mark Watson (www.markwatson.com); * (C) Copyright 2002-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2795746); (C) Copyright 2009-2013 by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2003-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Mike Harris; * Peter (C) Copyright 2000-2013, by Bryan Scott and Contributors. * * Original Author: Bryan Scott (based on MeterPlot by Hari). * Contributor(s): David Gilbert (for Object Refinery Limited). * (C) Copyright 2003-2008, by David Browning and Contributors. * * Original Author: David Browning (for Australian Institute of Marine * Science); * Contributor(s): David Gi (C) Copyright 2003-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2001-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2005-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2809117); * (C) Copyright 2003-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004-2013, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2008-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Andrzej Porebski (bug fix); * (C) Copyright 2004-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2809117); (C) Copyright 2003-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Nicolas Brodu; (C) Copyright 2007, 2008, by Richard West and Contributors. * * Original Author: Richard West, Advanced Micro Devices, Inc.; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2007-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb - see patch 2686872; (C) Copyright 2002-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Chuanhao Chiu; * (C) Copyright 2002-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2005-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (see patch 2809117); (C) Copyright 2006, 2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2005-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2809117); (C) Copyright 2006-2009, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2007-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2003-2008, by Barak Naveh and Contributors. * * Original Author: Barak Naveh; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): David Gilbert (for Object Refinery Limited); * Zhitao Wang; (C) Copyright 2003-2014, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributor(s): Jody Brownell; * David Gilbert (for Object Refinery (C) Copyright 2000-2013, by David Berry and Contributors. * * Original Author: David Berry; * Contributor(s): David Gilbert (for Object Refinery Limited); * Nicolas Brodu; (C) Copyright 2005-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Arnaud Lelievre; * Daniel Gredler; (C) Copyright 2003-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Christian W. Zuckschwerdt; (C) Copyright 2001-2012, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Chris Boek; (C) Copyright 2003-2013, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributors: David Gilbert (for Object Refinery Limited); * Fawa (C) Copyright 2001-2012, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2006-2013, by Object Refinery Limited; * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004-2014, by Andreas Schroeder and Contributors. * * Original Author: Andreas Schroeder; * Contributor(s): David Gilbert (for Object Refinery Limited); * Ro (C) Copyright 2001-2008, by Anthony Boulestreau and Contributors. * * Original Author: Anthony Boulestreau; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2005-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2007-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2008-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2014, by Serge V. Grachov and Contributors. * * Original Author: Serge V. Grachov; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): David Gilbert (for Object Refinery Limited); * Rich Copyright © 2001 (C) Copyright 2003-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Benoit Xhenseval; (C) Copyright 2004-2013, by Object Refinery Limited. * * Original Author: David Gilbert; * Contributor(s): Adriaan Joubert; (C) Copyright 2003-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2008, by Object Refinery Limited and Contributors. * * Original Author: Thomas Meier; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2001-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Bryan Scott; * Nick Guenther; (C) Copyright 2011-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2003-2014, by David Browning and Contributors. * * Original Author: David Browning (for Australian Institute of Marine * Science); * Contributor(s): David Gi (C) Copyright 2009, 2011 by Object Refinery Limited and Contributors. * * Original Author: Peter Kolb (see patch 2809117); * Contributor(s): ; (C) Copyright 2008-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2013, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributor(s): J?rgen Hoffman; * David Gilbert (for Object Refiner (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert; * Contributor(s): Jonathan Nash; * David Li; * (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Jonathan Nash; * (C) Copyright 2005-2008, by Object Refinery Limited. * * Original Author: Thomas Morgner; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2007-2014, by Christo Zietsman and Contributors. * * Original Author: Christo Zietsman; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004-2013, by Solution Engineering, Inc. and Contributors. * * Original Author: Daniel Bridenbecker, Solution Engineering, Inc.; * Contributor(s): David Gilbert (for Object Refiner (C) Copyright 2002-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Hans-Jurgen Greiner; (C) Copyright 2000-2014, by David Berry and Contributors. * * Original Author: David Berry; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Craig MacFarlane; * M (C) Copyright 2003-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (see patch 2809117); (C) Copyright 2007, 2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2011, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2006-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Michael Siemer; (C) Copyright 2001-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Aaron Metzger; (C) Copyright 2003-2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2511330); (C) Copyright 2002-2009, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2809117); (C) Copyright 2004-2013, by Solution Engineering, Inc. and Contributors. * * Original Author: Daniel Bridenbecker, Solution Engineering, Inc.; * Contributor(s): David Gilbert (for Object Refi (C) Copyright 2002-2008, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributors: David Gilbert (for Object Refinery Limited); (C) Copyright 2002-2008, by the Australian Antarctic Division and * Contributors. * * Original Author: Bryan Scott (for the Australian Antarctic Division); * Contribu (C) Copyright 2003-2010, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2013, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jfreechart/index.html (C) Copyright 2009, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2011, by Pascal Collet and Contributors. * * Original Author: Pascal Collet; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2005-2009, Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Arnaud Lelievre; (C) Copyright 2000-2014, by David Berry and Contributors; * * Original Author: David Berry; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Nick Guenther; (C) Copyright 2000-2014, by Andrzej Porebski and Contributors. * * Original Author: Andrzej Porebski; * Contributor(s): David Gilbert (for Object Refinery Limited); * Mart (C) Copyright 2003-2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Nicolas Brodu; (C) Copyright 2009-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -;

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(C) Copyright 2006-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Richard Atkinson; * (C) Copyright 2006-2011, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; Copyright (c) 2014, Object Refinery Limited. * All rights reserved (C) Copyright 2005-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert; * Contributor(s): Andrzej Porebski; * Arnaud Lelievre; (C) Copyright 2004-2014, by Hari and Contributors. * * Original Author: Hari (ourhari@hotmail.com); * Contributor(s): David Gilbert (for Object Refinery Limited); * Richard At (C) Copyright 2003-2014, by Nicolas Brodu and Contributors. * * Original Author: Nicolas Brodu; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2002-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Christian W. Zuckschwerdt; (C) Copyright 2007-2013, by David Forslund and Contributors. * * Original Author: David Forslund; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2005-2013, by David Gilbert and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Eric Penfold (patch 2006826); (C) Copyright 2005-2014, by Heaps of Flavour Pty Ltd and Contributors. * * Company Info: http://www.i4-talent.com (C) Copyright 2002-2014, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2002-2014, by Pascal Collet and Contributors. * * Original Author: Pascal Collet; * Contributor(s): David Gilbert (for Object Refinery Limited); * Christian (C) Copyright 2002-2008, by the Australian Antarctic Division and * Contributors. * * Original Author: Bryan Scott (for the Australian Antarctic Division); * Contrib (C) Copyright 2003-2013, by Klaus Rheinwald and Contributors. * * Original Author: Klaus Rheinwald; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): Tin Luu, * David Gilbert (for Object Refinery Limited (C) Copyright 2001-2014, by Bill Kelemen and Contributors. * * Original Author: Bill Kelemen; * Contributor(s): David Gilbert (for Object Refinery Limited); * Anthony Boulestr (C) Copyright 2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2001-2014, by Serge V. Grachov and Contributors. * * Original Author: Serge V. Grachov; * Contributor(s): David Gilbert (for Object Refinery Limited); * Tin (C) Copyright 2007-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): David Forslund; * (C) Copyright 2005-2008, by Object Refinery Limited. * * Original Author: Eric Thomas (www.isti.com); * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2004-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Bill Kelemen; (C) Copyright 2004-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2006, 2007, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Arnaud Lelievre; * Ulrich Voigt (patch (C) Copyright 2006-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2809117); (C) Copyright 2005-2011, by Object Refinery Limited and Contributors. * * Original Author: Martin Hoeller (base on DefaultNumberAxisEditor * by David Gilbert); * (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Andrzej Porebski; * (C) Copyright 2001-2009, by Bill Kelemen. * * Original Author: Bill Kelemen; * Contributor(s): -;

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(C) Copyright 2001-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Sam (oldman); (C) Copyright 2003-2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2497611); (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jfreechart/index.html (C) Copyright 2006-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; * Polish translation: Krzysztof Pa? (kpaz@samorza (C) Copyright 2000-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Chris Boek; (C) Copyright 2004-2014, by Tobias Selb and Contributors. * * Original Author: Tobias Selb (http://www.uepselon.com); * Contributor(s): David Gilbert (for Object Refinery Limited); * (C) Copyright 2002-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Pierre-Marie Le Biot; (C) Copyright 2003-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): ; (C) Copyright 2002-2014, by Anthony Boulestreau and Contributors. * * Original Author: Anthony Boulestreau; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2006-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2003-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004-2013, by Andreas Schroeder and Contributors. * * Original Author: Andreas Schroeder; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2000-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2007, 2008, by Sergei Ivanov and Contributors. * * Original Author: Sergei Ivanov; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2001-2014, by Object Refinery Limited. * * Original Authors: David Gilbert (for Object Refinery Limited); * Sylvain Vieujot; * Contributor(s): Richard Atki (C) Copyright 2003-2014, by Arnaud Lelievre and Contributors. * * Original Author: Arnaud Lelievre (for Garden); * Contributor(s): David Gilbert (for Object Refinery Limited); * (C) Copyright 2009, by Object Refinery Limited and Contributors. * * Original Author: Ulrich Voigt - patch 2686040; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003-2014, by Object Refinery Limited and Contributors. * * Original Author: Darshan Shah; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2001-2014, by Achilleus Mantzios and Contributors. * * Original Author: Achilleus Mantzios; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2004-2014, by David Browning and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2009-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2001-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Sylvain Vieujot; (C) Copyright 2002-2014, by Jeremy Bowman. * * Original Author: Jeremy Bowman; * Contributor(s): David Gilbert (for Object Refinery Limited); * Christian W. Zuckschwerdt; (C) Copyright 2009-2014 by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Ulrich Voigt - patch 2686040; * (C) Copyright 2004-2012, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2006-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2004-2011, by Solution Engineering, Inc. and Contributors. * * Original Author: Daniel Bridenbecker, Solution Engineering, Inc.; * Contributor(s): David Gilbert (for Object Refiner

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(C) Copyright 2004-2008, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributor(s): -; (C) Copyright 2007-2014, by Klaus Rheinwald and Contributors. * * Original Author: Klaus Rheinwald; * Contributor(s): Tobias von Petersdorff (tvp@math.umd.edu, * http://ww (C) Copyright 2003-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2809117); (C) Copyright 2004-2014, by Brian Cole and Contributors. * * Original Author: Brian Cole; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2008, 2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2003-2014, by David Browning and Contributors. * * Original Author: David Browning; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2001-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2008, 2012 by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2003-2008, by David Browning and Contributors. * * Original Author: David Browning (for Australian Institute of Marine * Science); * Contributor(s): -; (C) Copyright 2003-2014, by Bill Kelemen and Contributors. * * Original Author: Bill Kelemen; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2004-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Rune Fauske; Copyright (c) 2005-2014, Object Refinery Limited. * All rights reserved (C) Copyright 2002-2013, by Jeremy Bowman and Contributors. * * Original Author: Jeremy Bowman; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2005-2014, by Object Refinery Limited and Contributors. * * Original Author: Mofeed Shahin; * Contributor(s): David Gilbert (for Object Refinery Limited); * (C) Copyright 2002-2014, by Object Refinery Limited. * * Original Author: Tomer Peretz; * Contributor(s): David

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Gilbert (for Object Refinery Limited); * Christian W. Zucks (C) Copyright 2002-2008, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2008, by Diego Pierangeli and Contributors. * * Original Author: Diego Pierangeli; * Contributors: David Gilbert (for Object Refinery Limited); (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Original Author: Michael Duffy / Eric Thomas; * Contributor(s): David Gilbert (for Object Refinery Limited); * (C) Copyright 2001-2014, by Bill Kelemen and Contributors. * * Original Author: Bill Kelemen; * Contributor(s): David Gilbert (for Object Refinery Limited); * Anthony Boul (C) Copyright 2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2001-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): David Basten; (C) Copyright 2004-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited). * Contributor(s): -; (C) Copyright 2001-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Mark Watson (www.markwatson.com); * (C) Copyright 2005-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2014, by Hari and Contributors. * * Original Author: Hari (ourhari@hotmail.com); * Contributor(s): David Gilbert (for Object Refinery Limited); * Richard At (C) Copyright 2003-2014, by Sylvain Vieujot and Contributors. * * Original Author: Sylvain Vieujot; * Contributor(s): David Gilbert (for Object Refinery Limited); * Simon (C) Copyright 2004-2013, by Object Refinery Limited and Contributors. * * Original Author: Angel; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2007, 2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2014, by Hari and Contributors. * * Original Author: Hari (ourhari@hotmail.com); *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): David Gilbert (for Object Refinery Limited); * Bob Or (C) Copyright 2006-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Andrew Mickish (patch 1868745); * (C) Copyright 2007-2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jfreechart/index.html (C) Copyright 2004-2008, by David Basten and Contributors. * * Original Author: David Basten; * Contributors: -; (C) Copyright 2001-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Serge V. Grachov; * (C) Copyright 2004-2013, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributor(s): David Gilbert (for Object Refinery Limited); * Fawa (C) Copyright 2005-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Sergei Ivanov; (C) Copyright 2003-2008, by Jelai Wang and Contributors. * * Original Author: Jelai Wang (jelaiw AT mindspring.com); * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003-2008, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributors: David Gilbert (for Object Refinery Limited); (C) Copyright 2002-2013, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributors: David Gilbert (for Object Refinery Limited); (C) Copyright 2001-2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2003-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Jeremy Bowman; (C) Copyright 2003-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Richard West, Advanced Micro Devices, (C) Copyright 2003-2008, by Robert Redburn and Contributors. * * Original Author: Robert Redburn; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2004-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Limited); * Contributor(s): Brian Cabana (patch 1943021); (C) Copyright 2008-2014 by Andreas Haumer, xS * * Original Author: Martin Hoeller (x Software + Systeme xS+S - Andreas * Haumer); * Contributor(s): David Gilbert (for (C) Copyright 2004-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited), based on * the StackedXYAreaRenderer cl (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert; * Contributor(s): Pady Srinivasan (patch 1217634); * Peter Kolb ((C) Copyright 2009-2013, by Object Refinery Limited and Contributors. * * Original Author: Peter Kolb (see patch 2809117); * Contributor(s): -; (C) Copyright 2003-2011, by Cameron Riley and Contributors. * * Original Author: Cameron Riley; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2002-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Richard Atkinson; * Christian W. Z (C) Copyright 2008-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2809117); (C) Copyright 2004-2014, by Andreas Schroeder and Contributors. * * Original Author: Andreas Schroeder; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2005-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): ; (C) Copyright 2006-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2009, by Bryan Scott and Contributors. * * Original Author: Bryan Scott; * Contributor(s): David Gilbert (for Object Refinery Limited); * Eric Alexander (C) Copyright 2003-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2008, Australian Antarctic Division and Contributors. * * Original Author: Bryan Scott. * Contributor(s): David Gilbert (for Object Refinery Limited); * (C) Copyright 2003-2014, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): Christian W. Zuckschwerdt; * David Gilbert (for Obj (C) Copyright 2002-2014, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributors: David Gilbert (for Object Refinery Limited); (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Bill Kelemen; * N (C) Copyright 2002-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2008, by Eduard Martinescu and Contributors. * * Original Author: Eduard Martinescu; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Ulrich Voigt; * G (C) Copyright 2002-2014, by I. H. Thomae and Contributors. * * Original Author: I. H. Thomae (ithomae@ists.dartmouth.edu); * Contributor(s): David Gilbert (for Object Refinery Limited); * (C) Copyright 2002-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Richard Atkinson; * Peter Kolb (pa (C) Copyright 2003-2014, by Matthias Rose and Contributors. * * Original Author: Matthias Rose (based on XYAreaRenderer.java); * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2006-2008, by Anthony Boulestreau and Contributors. * * Original Author: Anthony Boulestreau; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2000-2013, by Object Refinery Limited and Contributors. * * Project Info: http://www.jfree.org/jfreechart/index.html (C) Copyright 2009-2013, by Object Refinery Limited. * * Original Author: Peter Kolb; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2002-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Christian W. Zuckschwerdt; * Peter (C) Copyright 2006-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2014, by Matthew Wright and Contributors. * * Original Author: Matthew Wright; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003-2008, by Nicolas Brodu and Contributors. * * Original Author: Nicolas Brodu; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2000-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2014, by Jon Iles and Contributors. * * Original Author: Jon Iles; * Contributor(s): David Gilbert (for Object Refinery Limited); * Christian W. Zucksch (C) Copyright 2002-2014, by Roger Studner and Contributors. * * Original Author: Roger Studner; * Contributor(s): David Gilbert (for Object Refinery Limited); * Matthias Rose; (C) Copyright 2000-2008, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003-2008, by Barak Naveh and Contributors. * * Original Author: Barak Naveh; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003-2013, by David M. O * * Original Author: David M. O'Donnell; * Contributor(s): David Gilbert (for Object Refinery Limited); * Nicolas Brodu; (C) Copyright 2002-2008, by David M. O * * Original Author: David M. O'Donnell; * Contributor(s): David Gilbert (for Object Refinery Limited); * Arnaud Lelievre; (C) Copyright 2000-2008, by Object Refinery Limited and Contributors. * * Original Author: Bill Kelemen; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2005-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2008, by Bryan Scott and Contributors. * * Original Author: Bryan Scott; Andy; * Contributor(s): David Gilbert (for Object Refinery Limited); * Thomas M (C) Copyright 2007, 2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributors: -; (C) Copyright 2001-2009, by Serge V. Grachov and Contributors. * * Original Author: Serge V. Grachov; * Contributor(s): David Gilbert (for Object Refinery Limited); * Jona

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(C) Copyright 2004-2014, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributor(s): -; (C) Copyright 2001-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Wolfgang Irler; * (C) Copyright 2005-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2809117); (C) Copyright 2005-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2008, 2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2013, 2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Richard Atkinson; * F (C) Copyright 2002-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Thomas Morgner; (C) Copyright 2003-2013, by Ondax, Inc. and Contributors. * * Original Author: Greg Steckman (for Ondax, Inc.); * Contributor(s): David Gilbert (for Object Refinery Limited); * (C) Copyright 2013-2014 by Peter Kolb and Contributors. * * Original Author: Peter Kolb; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2006-2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Sylvain Vieujot; * Je (C) Copyright 2002-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Thomas Schuster; (C) Copyright 2001-2008, by Achilleus Mantzios and Contributors. * * Original Author: Achilleus Mantzios; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2003-2014, by Barak Naveh and Contributors. * * Original Author: Barak Naveh; *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2005-2013, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): ; (C) Copyright 2003-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Christian W. Zuckschwerdt; (C) Copyright 2009, 2011, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2000-2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2003-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributors: -; (C) Copyright 2009, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2003-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 1934255); * Andr (C) Copyright 2005-2013, by Object Refinery Limited and Contributors. * * Original Author: Martin Hoeller; * Contributor(s): -; (C) Copyright 2001-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Mark Watson (www.markwatson.com); * (C) Copyright 2002-2008, by David M. O * * Original Author: David M. O'Donnell; * Contributor(s): David Gilbert (for Object Refinery Limited); (C) Copyright 2007-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2009, by Object Refinery Limited and Contributors. * * Original Author: Peter Kolb (patch 2809117); * Contributor(s): ; (C) Copyright 2002-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Luke Quinane; * B (C) Copyright 2003-2008, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; (C) Copyright 2003-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2809117); (C) Copyright 2001-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Limited); * Contributor(s): Richard Atkinson; * Andreas Schroe (C) Copyright 2002-2009, by Bryan Scott and Contributors. * * Original Author: Bryan Scott; Andy * Contributor(s): David Gilbert (for Object Refinery Limited); * Thomas Mo (C) Copyright 2002-2013, by Richard Atkinson and Contributors. * * Original Author: Richard Atkinson; * Contributor(s): -; (C) Copyright 2001-2011, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Mark Watson (www.markwatson.com); (C) Copyright 2003-2013, by Object Refinery Limited and contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Peter Kolb (patch 2511330); (C) Copyright 2005-2011, by Object Refinery Limited and Contributors. * * Original Author: Martin Hoeller; * Contributor(s): -; (C) Copyright 2001-2008, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2002-2014, by Dan Rivett (d.rivett@ukonline.co.uk) and * Contributors. * * Original Author: Dan Rivett (adapted from AreaRenderer); * Contributor(s): (C) Copyright 2005-2009, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Andrzej Porebski; * (C) Copyright 2000-2014, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Jeremy Bowman; * Arna (C) Copyright 2007-2013, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2001-2014, by Object Refinery Limited. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): -; (C) Copyright 2001-2014, Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Aaron Metzger; * Jon (C) Copyright 2003-2008, by Object Refinery Limited and Contributors. * * Original Author: David Gilbert (for Object Refinery Limited); * Contributor(s): Luke Quinane; jnr-posix (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (C) 2007 Thomas E Enebo Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved Copyright jQuery Foundation and other contributors */; (function(factory) { if (typeof define === "function" && define.amd) { (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright (C) 2007 Copyright jQuery Foundation and other contributors Copyright JS Foundation and other contributors Copyright (C) 2007 Charles O Nutter Copyright (C) 2008 JRuby Community Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved spotbugs-annotations Copyright (C) 2005-2006, University of Maryland (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (C) 2005-2006 University of Maryland Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved Copyright (C) 2005 University of Maryland Copyright jQuery Foundation and other contributors; Licensed MIT (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright (C) 2008, University of Maryland Copyright jQuery Foundation and other contributors Copyright (C) 2003-2007 University of Maryland Copyright (C) 2005, University of Maryland Copyright JS Foundation and other contributors Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved GNU Lesser General Public License ========== Version 2.1, February 1999 See Appendix B ========== ========== ========== = Apache License:- ant Copyright (c) 2002, LandmarkGraphics Corp that has been kindly donated to the Apache Software (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved Copyright 1999-2020 The Apache Software Foundation copyright in this software and any associated documentation will atall times remain with copyright holders. copyright-software-20021231 Copyright JS Foundation and other contributors Copyright (c) 2015, 2019, Oracle and/or its affiliates. All rights reserved Copyright FAQ for commonquestions about using materials from our site, including specific terms andconditions for packages like libwww, Amaya, and Jigsaw. Other questions aboutthis notice can be di Copyright JS Foundation and other contributors Copyright (C) 1995-2013 Jean-loup Gailly and Mark Adler ant-launcher Copyright (c) 2002, LandmarkGraphics Corp that has been kindly donated to the Apache Software Copyright FAQ for commonquestions about using materials from our site, including specific terms andconditions for packages like libwww, Amaya, and Jigsaw. Other questions aboutthis notice can be di Copyright 1999-2020 The Apache Software Foundation copyright in this software and any associated documentation will atall times remain with copyright holders. copyright-software-20021231 commons-beanutils Copyright 2000-2019 The Apache Software Foundation commons-codec Copyright (c) 2004-2006 Intel Corportation Copyright (C) 2002 Kevin Atkinson (kevina@gnu.org). Copyright 2002-2020 The Apache Software Foundation commons-collections Copyright 2001-2015 The Apache Software Foundation commons-compress Copyright (c) 2004-2006 Intel Corportation copyright (C) 1996-2019 Julian R Seward. Allrights reserved. Copyright 2002-2020 The Apache Software Foundation Copyright 2002-2014 The Apache Software Foundation commons-discovery Copyright 2002-2011 The Apache Software Foundation

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		commons-fileupload Copyright 2002-2018 The Apache Software Foundation commons-httpclient Copyright 1999-2007 The Apache Software FoundationThis product includes software developed by commons-io Copyright 2002-2020 The Apache Software Foundation commons-jelly Copyright 2002,2004 The Apache Software Foundation. commons-jelly-tags-define Copyright 2002,2004 The Apache Software Foundation. Copyright 1999-2002,2004 The Apache Software Foundation. commons-jelly-tags-fmt Copyright 2002,2004 The Apache Software Foundation. Copyright 1999,2004 The Apache Software Foundation. commons-jelly-tags-xml Copyright 2002,2004 The Apache Software Foundation. Copyright 1999,2004 The Apache Software Foundation. commons-jexl-1.1-jenkins Copyright 2002,2004 The Apache Software Foundation. Copyright 2002-2006 The Apache Software Foundation. commons-lang Copyright 2001-2011 The Apache Software FoundationThis product includes software developed by ezmorph Copyright 2006-2007 the original author or authors. Copyright 2006-2007-2007 the original author or authors. groovy-all Copyright 2003-2017 The Apache Software Foundation Copyright 2003-2017 The Apache Software Foundation. Copyright (c) 2006, Sun Microsystems, Inc.All rights reserved Copyright © 2003-2017 The Apache Software Foundation. All rights reserved Copyright 2006 Sun Microsystems, Inc. All rights reserved Copyright (c) 2002-2012, the original author or authors. Copyright (c) 2000-2011 INRIA, France TelecomAll rights reserved Copyright (c) Nicolas Gallagher and Jonathan Neal

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		guava Copyright (C) 2006 The Guava Authors Copyright (C) 2004 The Guava Authors Copyright (C) 2009 The Guava Authors Copyright (C) 2007 The Guava Authors Copyright (C) 2008 The Guava Authors Copyright 2011 Google Inc. All Rights Reserved Copyright (C) 2009 Google Inc. Copyright (C) 2011 The Guava Authors. Copyright (C) 2011 The Guava Authors Copyright (C) 2010 The Guava Authors guice Copyright (C) 2011 Google Inc. Copyright (C) 2012 Google Inc. Copyright © 2006-2015 Google, Inc.. All Rights Reserved Copyright (C) 2010 Google Inc. Copyright (C) 2009 Google Inc. Copyright (C) 2008 Google Inc. Copyright (C) 2013 Google Inc. Copyright (C) 2007 Google Inc. Copyright (C) 2014 Google Inc. Copyright 2007 Google Inc. All Rights Reserved Copyright 2006-2015 Google, Inc. Copyright (C) 2006 Google Inc. Copyright (C) 2015 Google Inc. jansi Copyright (C) 2009, Progress Software Corporation and/or its Copyright (C) 2009 the original author(s). javax.inject jaxen Copyright (C) 2009 The JSR-330 Expert Group jcl-over-slf4j Copyright 2001-2004 The Apache Software Foundation. jffi Copyright (C) 2009 Wayne Meissner * * This file is part of jffi. (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved Copyright (C) 2008 Wayne Meissner * * This file is part of jffi.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright jQuery Foundation and other contributors; Licensed MIT Copyright (C) 2007, 2008, 2009 Wayne Meissner * * This file is part of jffi. Copyright (C) 2008, 2009 Wayne Meissner * * This file is part of jffi. Copyright (C) 2008-2010 Wayne Meissner * * This file is part of jffi. Copyright jQuery Foundation and other contributors */; (function(factory) { if (typeof define === "function" && define.amd) { (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright (C) 2007-2009 Wayne Meissner * * This file is part of jffi. Copyright (C) 2007, 2008 Wayne Meissner * * This file is part of jffi. Copyright jQuery Foundation and other contributors Copyright JS Foundation and other contributors Copyright (C) 2011 Wayne Meissner * * This file is part of jffi. Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved Jffi-native Copyright (C) 2009 Wayne Meissner * * This file is part of jffi. (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved Copyright (C) 2008 Wayne Meissner * * This file is part of jffi. Copyright jQuery Foundation and other contributors; Licensed MIT Copyright (C) 2007, 2008, 2009 Wayne Meissner * * This file is part of jffi. Copyright (C) 2008, 2009 Wayne Meissner * * This file is part of jffi. Copyright (C) 2008-2010 Wayne Meissner * * This file is part of jffi. Copyright jQuery Foundation and other contributors */; (function(factory) { if (typeof define === "function" && define.amd) { (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright (C) 2007-2009 Wayne Meissner * * This file is part of jffi. Copyright (C) 2007, 2008 Wayne Meissner * * This file is part of jffi. Copyright jQuery Foundation and other contributors Copyright JS Foundation and other contributors

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (C) 2011 Wayne Meissner * * This file is part of jffi. Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved jnr-a64asm Copyright (C) 2018 Ossdev07 * * This file is part of the JNR project. jnr-constants Copyright © 2020. All rights reserved (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved Copyright jQuery Foundation and other contributors */; (function(factory) { if (typeof define === "function" && define.amd) { (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright jQuery Foundation and other contributors Copyright JS Foundation and other contributors Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved jnr-ffi (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved Copyright © 2021. All rights reserved Copyright (C) 2007 The Guava Authors Copyright (C) 2008 The Guava Authors Copyright (C) 2014 Wayne Meissner * * This file is part of the JNR project. Copyright (C) 2008-2010 Wayne Meissner * * This file is part of the JNR project. Copyright jQuery Foundation and other contributors; Licensed MIT Copyright (C) 2017 Oracle and/or its affiliates. * * This file is part of the JNR project. Copyright (C) 2011 Wayne Meissner * * This file is part of the JNR project. Copyright (C) 2008-2011 Wayne Meissner * * This file is part of the JNR project. Copyright (C) 2012 Wayne Meissner * * This file is part of the JNR project. Copyright 2010 The Miyamoto Team Copyright jQuery Foundation and other contributors */; (function(factory) { if (typeof define === "function" && define.amd) { (C) 1995-2013 Jean-loup Gailly and Mark Adler

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright jQuery Foundation and other contributors Copyright (C) 2006 - Javolution (http://javolution.org/) * All rights reserved Copyright (C) 2010 Wayne Meissner * * This file is part of the JNR project. Copyright JS Foundation and other contributors Copyright (C) 2013 Wayne Meissner * * This file is part of the JNR project. Copyright (C) 2008-2012 Wayne Meissner * * This file is part of the JNR project. Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved Copyright (C) 2009-2010 Wayne Meissner * * This file is part of the JNR project. Copyright (C) 2016 Wayne Meissner * * This file is part of the JNR project. json-lib-jenkins Copyright 2002-2009 the original author or authors. org.powermock org.objenesis Copyright 2007-2017 PowerMock Contributors log4j-over-slf4j Copyright 2001-2004 The Apache Software Foundation. remoting Copyright (c) 2013 Kohsuke Kawaguchi and other contributors Copyright (c) 2004-2010, Sun Microsystems, Inc., Kohsuke Kawaguchi, CloudBees, Inc. Copyright (c) 2004-2010, Sun Microsystems, Inc., Kohsuke Kawaguchi Copyright (c) 2004-2018, Sun Microsystems, Inc., Kohsuke Kawaguchi, CloudBees, Inc. Copyright (c) 2016, Stephen Connolly, CloudBees, Inc., and others Copyright 2018 CloudBees, Inc. Copyright 2013 Jesse Glick. Copyright (c) 2010, InfraDNA, Inc. Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi, CloudBees, Inc. Copyright 1999-2002,2004 The Apache Software Foundation. Copyright (c) 2012, 2017 Oracle and/or its affiliates. All rights reserved Copyright (c) 2016- CloudBees, Inc. Copyright (c) 2016 CloudBees, Inc. Copyright (c) 2016, Stephen Connolly, CloudBees, Inc.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2004-2016, Sun Microsystems, Inc., Kohsuke Kawaguchi, Daniel Dyer, Stephen Connolly, and others Copyright (c) 2011, CloudBees, Inc. Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi, Ullrich Hafner Copyright (c) 2016, CloudBees, Inc. Copyright (c) 2019, CloudBees, Inc. Copyright 2006-2008 Makoto YUI Copyright (c) 2017 CloudBees, Inc. Copyright (c) 2018, CloudBees, Inc. Copyright (c) 2004-2009, Sun Microsystems, Inc. Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi Copyright (c) 2016, CloudBees, Inc., Stephen Connolly spring-beans Copyright 2002-2020 the original author or authors. Copyright 2002-2021 the original author or authors. Copyright 2006-2019 Joe Walnes, Henri Tremblay, Leonardo Mesquita Copyright (c) 2002-2021 Pivotal, Inc. Copyright 2002-2018 the original author or authors. Copyright 2002-2019 the original author or authors. Copyright 2002-2015 the original author or authors. Copyright 2002-2014 the original author or authors. Copyright 2002-2017 the original author or authors. Copyright (c) 1999-2009, OW2 Consortium Copyright 2002-2016 the original author or authors. Copyright 2002-2010 the original author or authors. Copyright 2002-2009 the original author or authors. Copyright 2002-2011 the original author or authors. Copyright 2002-2007 the original author or authors. Copyright 2002-2012 the original author or authors. Copyright 2002-2013 the original author or authors. Copyright (c) 2000-2011 INRIA, France TelecomAll rights reserved spring-aop Copyright 2002-2020 the original author or authors. Copyright 2002-2021 the original author or authors. Copyright 2006-2019 Joe Walnes, Henri Tremblay, Leonardo Mesquita Copyright (c) 2002-2021 Pivotal, Inc. Copyright 2002-2018 the original author or authors. Copyright 2002-2019 the original author or authors. Copyright 2002-2015 the original author or authors.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2002-2014 the original author or authors. Copyright 2002-2017 the original author or authors. Copyright (c) 1999-2009, OW2 Consortium Copyright 2002-2016 the original author or authors. Copyright 2002-2010 the original author or authors. Copyright 2002-2009 the original author or authors. Copyright 2002-2011 the original author or authors. Copyright 2002-2007 the original author or authors. Copyright 2002-2012 the original author or authors. Copyright 2002-2013 the original author or authors. Copyright (c) 2000-2011 INRIA, France TelecomAll rights reserved Apache License Version 2.0, January 2004 ========== See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Jenkins CI	Jenkins 2.377	TOP-LEVEL COPYRIGHT NOTICE for jenkins The MIT License ---------separator-------- Copyright (c) 2004-2022, Kohsuke Kawaguchi, Sun Microsystems, Inc., and a number of other of contributors See Appendix G ---------separator-------- org.jenkins-ci.main:cli org.jenkins-ci.main:remoting org.jenkins-ci.main:jenkins-core The MIT License Copyright (c) 2004-2022, Kohsuke Kawaguchi, Sun Microsystems, Inc., and a number of other of contributors See Appendix G ---------separator-------- antlr Copyright (c) 2012-2017 The ANTLR Project. All rights reserved ANTLR License:- SOFTWARE RIGHTS ANTLR 1989-2004 Developed by Terence Parr Partially supported by University of San Francisco & jGuru.com We reserve no legal rights to the ANTLR--it is fully in the public domain. An individual or company may do whatever they wish with source code distributed with ANTLR or the code generated by ANTLR, including the incorporation of ANTLR, or its output, into commerical software. We encourage users to develop software with ANTLR. However, we do ask that credit is given to us for developing ANTLR. By "credit", we mean that if you use ANTLR or incorporate any source code into one of your programs (commercial product, research project, or otherwise) that you acknowledge this fact somewhere in the documentation, research report, etc... If you like ANTLR and have developed a nice tool with the output, please mention that you developed it using ANTLR. In

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		addition, we ask that the headers remain intact in our source code. As long as these guidelines are kept, we expect to continue enhancing this system and expect to make other tools available as they are completed. The primary ANTLR guy: Terence Parr parrt@cs.usfca.edu parrt@antlr.org ---------separator-------- jakarta.servlet.jsp.jstl-api is Eclipse Public License 2.0 and Sun GPL With Classpath Exception v2.0:- Copyright © 2019 Eclipse Foundation. All rights reserved Copyright 2004 The Apache Software Foundation Copyright (c) 1997-2018 Oracle and/or its affiliates. All rights reserved Copyright (c) 1997, 2018 Oracle and/or its affiliates. All rights reserved Eclipse Public License 2.0 License:- See Appendix Y ********** ********** The GNU General Public License (GPL) Version 2, June 1991 Copyright (C) 1989, 1991 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor Boston, MA 02110-1335 USA See Appendix A END OF TERMS AND CONDITIONS How to Apply These Terms to Your New Programs If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms. To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		"copyright" line and a pointer to where the full notice is found. One line to give the program's name and a brief idea of what it does. Copyright (C) <year> <name of author> This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details. You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1335 USA Also add information on how to contact you by electronic and paper mail. If the program is interactive, make it output a short notice like this when it starts in an interactive mode: Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details. The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker. signature of Ty Coon, 1 April 1989 Ty Coon, President of Vice This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License. CLASSPATH EXCEPTION Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License version 2 cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		do so. If you do not wish to do so, delete this exception statement from your version. NOTICE.md Notices for Eclipse Project for Jakarta Standard Tag Library This content is produced and maintained by the Eclipse Project for Jakarta Standard Tag Library project. Project home: https://projects.eclipse.org/projects/ee4j.jstl Trademarks Eclipse Project for Jakarta Standard Tag Library is a trademark of the Eclipse Foundation. Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/jstl-api Third-party Content This project leverages the following third party content. None Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------separator-------- args4j Copyright (c) 2013 Kohsuke Kawaguchi and other contributors See Appendix G ---------separator-------- com.github.spotbugs:spotbugs-annotations Copyright (C) 2005-2006, University of Maryland (C) 2014-2017 Vitaly Puzrin and Andrey Tupitsin Copyright (C) 2005-2006 University of Maryland Copyright (c) 2013, 2018, Oracle and/or its affiliates. All rights reserved Copyright (C) 2005 University of Maryland Copyright jQuery Foundation and other contributors; Licensed MIT (C) 1995-2013 Jean-loup Gailly and Mark Adler Copyright (C) 2008, University of Maryland Copyright jQuery Foundation and other contributors Copyright (C) 2003-2007 University of Maryland Copyright (C) 2005, University of Maryland Copyright JS Foundation and other contributors Copyright (c) 2015, 2018, Oracle and/or its affiliates. All rights reserved GNU Lesser General Public License Version 2.1, February 1999 See Appendix B END OF TERMS AND CONDITIONS How to Apply These Terms to Your New Libraries If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License). To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		one line to give the library's name and an idea of what it does. Copyright (C) year name of author This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Also add information on how to contact you by electronic and paper mail. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker. signature of Ty Coon, 1 April 1990 Ty Coon, President of Vice That's all there is to it! ---------separator-------- com.google.guava:guava: Apache License, Version 2.0[1] /* * Copyright (C) 2007 The Guava Authors

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator-------- com.google.guava:failureaccess: Apache License, Version 2.0[1] /* * Copyright (C) 2018 The Guava Authors * * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except * in compliance with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software distributed under the License * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express * or implied. See the License for the specific language governing permissions and limitations under * the License. */ ---------separator-------- com.google.guava:listenablefuture:Apache License, Version 2.0[1] /* * Copyright (C) 2007 The Guava Authors

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except * in compliance with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software distributed under the License * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express * or implied. See the License for the specific language governing permissions and limitations under * the License. */ ---------separator-------- com.google.inject:guice:Apache License, Version 2.0[1] /* * Copyright (C) 2010 Google, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator-------- javax.inject:javax.inject:Apache License, Version 2.0[1] /* * Copyright (C) 2009 The JSR-330 Expert Group *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator-------- com.infradna.tool:bridge-method-annotation /* * The MIT License * * Copyright (c) 2010, InfraDNA, Inc. * See Appendix G ---------separator-------- com.jcraft:jzlib JZlib 0.0.* were released under the GNU LGPL license. Later, we have switched over to a BSD-style license. Copyright (c) 2000-2011 ymnk, JCraft,Inc. All rights reserved. See Appendix M ---------separator-------- com.sun.solaris:embedded_su4j MIT License Copyright (c) 2022 Kohsuke Kawaguchi See Appendix G ---------separator-------- relaxngDatatype:relaxngDatatype

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Jenkins CI	Jenkins active choices plug 2.5.7 Jenkins active choices plug 2.6.4	The MIT License (MIT) Copyright (c) 2014-2020 Ioannis K. Moutsatsos, Bruno P. Kinoshita See Appendix G ---------- script-security(https://plugins.jenkins.io/script-security/#releases) ---------- The MIT License (MIT) Copyright (c) 2011-2016 Dominik Bartholdi See Appendix G ---------- OWASP Markup Formatter(https://plugins.jenkins.io/antisamy-markup-formatter/#releases) ---------- The MIT License (MIT) Copyright (c) 2011-2016 Dominik Bartholdi See Appendix G ---------- The following dependency list the following license in the pom.xml only ---------- JQuery3 API Plugin MIT License Copyright (c) 2019 Dr. Ullrich Hafner See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Oracle	jersey-core 2.31	****DEVELOPMENT MUST INSERT THE INFORMATION IN THE SECTIONS BELOW****** The documentation team must include the following in the documentation accompanying the Oracle product that includes the EPL code: 1. The follow files are available in source code form under the Eclipse Public License at: {INSERT WEBSITE WHERE SOURCE CODE IS AVAILABLE}. (The EPL license is reproduced below). 2. All past Contributors to the {INSERT THE NAME OF THE EPL CODE} disclaim all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose. In addition, such Contributors are not liable for any damages, including direct, indirect, special, incidental and consequential damages, such as lost profits. 3. Any provisions of the Oracle license agreement that differ from the Eclipse Public License are offered by Oracle alone and not by any other party. 4. { IF THERE ARE MODIFICATIONS OR ADDITIONS, INSERT THE FOLLOWING} Oracle has modified the following files {LIST FILES} 5. { IF EXECUTABLES ARE UNDER ORACLE AGREEMENT AS OPPOSED TO THE EPL, INSERT THE FOLLOWING} These files are licensed in executable form under your Oracle license agreement. Oracle is solely responsible for any representations and warranties contained therein. Copyright (c) 2010, 2020 Oracle and/or its affiliates. All rights reserved This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. Oracle elects the EPL 2.0 license. Eclipse Public License - v 2.0 - See Appendix Y GPL v2 - See Appendix A ---------- Fourth Party Dependencies

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		++++++++++4th party dependencies++++++++ jakarta.ws.rs-api, v2.1.6, EPL 2.0+ GPLv2.0 CPE jakarta.annotation-api, v1.3.5 , EPL 2.0+ GPLv2.0 CPE Copyright (c) 2017, 2020 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0, which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception, which is available at https://www.gnu.org/software/classpath/license.html. ++++++++++++++++++++ jakarta.inject, v2.6.1 , Apache 2.0 Copyright (C) 2009 The JSR-330 Expert Group Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ++++++++++++++++ org.osgi.core, v6.0.0, Apache 2.0 Copyright (c) OSGi Alliance (2000, 2013). All Rights Reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
GlassFish	jersey-hk2 2.31	****DEVELOPMENT MUST INSERT THE INFORMATION IN THE SECTIONS BELOW****** The documentation team must include the following in the documentation accompanying the Oracle product that includes the EPL code: 1. The follow files are available in source code form under the Eclipse Public License at: {INSERT WEBSITE WHERE SOURCE CODE IS AVAILABLE}. (The EPL license is reproduced below). 2. All past Contributors to the {INSERT THE NAME OF THE EPL CODE} disclaim all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose. In addition, such Contributors are not liable for any damages, including direct, indirect, special, incidental and consequential damages, such as lost profits. 3. Any provisions of the Oracle license agreement that differ from the Eclipse Public License are offered by Oracle alone and not by any other party. 4. { IF THERE ARE MODIFICATIONS OR ADDITIONS, INSERT THE FOLLOWING} Oracle has modified the following files {LIST FILES} 5. { IF EXECUTABLES ARE UNDER ORACLE AGREEMENT AS OPPOSED TO THE EPL, INSERT THE FOLLOWING} These files are licensed in executable form under your Oracle license agreement. Oracle is solely responsible for any representations and warranties contained therein. Copyright (c) 2017,2019 Oracle and/or its affiliates. All rights reserved. Eclipse Public License - v 2.0 - See Appendix Y --- Fourth Party Dependencies --- "ServiceLocator Default Implementation" (org.glassfish.hk2:hk2-locator) Copyright (c) 2010,2019 Oracle and/or its affiliates. All rights reserved. Copyright (c) 2019 Payara Service Ltd. and/or its affiliates. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "Jakarta Annotations API" (jakarta.annotation:jakarta.annotation-api) Copyright (c) 2005,2018 Oracle and/or its affiliates. All rights reserved. Copyright © 2019 Eclipse Foundation. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "jersey-core-common" (org.glassfish.jersey.core:jersey-common) Copyright (c) 2007,2020 Oracle and/or its affiliates. All rights reserved. Copyright (c) 2018 Payara Foundation and/or its affiliates. Copyright (C) 2006,2014 The Guava Authors EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "jakarta.ws.rs-api" (jakarta.ws.rs:jakarta.ws.rs-api) Copyright (c) 2010,2019 Oracle and/or its affiliates. All rights reserved. Copyright (c) 2006 Google Inc. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "OSGi resource locator" (org.glassfish.hk2:osgi-resource-locator) Copyright (c) 2009,2018 Oracle and/or its affiliates. All rights reserved. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "javax.inject:1 as OSGi bundle" (org.glassfish.hk2.external:jakarta.inject) Copyright (C) 2009 The JSR-330 Expert Group Copyright (c) 2010,2018 Oracle and/or its affiliates. All rights reserved. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "Javassist" (org.javassist:javassist) Copyright (C) 1999- Shigeru Chiba. All Rights Reserved. Copyright (C) 1999- Shigeru Chiba. All Rights Reserved.</i>]]></bottom> Copyright (C) 2004 Bill Burke. All Rights Reserved. MPL 1.1, LGPL 2.1, Apache License 2.0 Mozilla Public License Version 1.1 - See Appendix S GPL 2.1 - See Appendix T Apache 2.0 license - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Eclipse Foundation	jersey-media-json-binding 2.31	****DEVELOPMENT MUST INSERT THE INFORMATION IN THE SECTIONS BELOW****** The documentation team must include the following in the documentation accompanying the Oracle product that includes the EPL code: 1. The follow files are available in source code form under the Eclipse Public License at: {INSERT WEBSITE WHERE SOURCE CODE IS AVAILABLE}. (The EPL license is reproduced below). 2. All past Contributors to the {INSERT THE NAME OF THE EPL CODE} disclaim all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose. In addition, such Contributors are not liable for any damages, including direct, indirect, special, incidental and consequential damages, such as lost profits. 3. Any provisions of the Oracle license agreement that differ from the Eclipse Public License are offered by Oracle alone and not by any other party. 4. { IF THERE ARE MODIFICATIONS OR ADDITIONS, INSERT THE FOLLOWING} Oracle has modified the following files {LIST FILES} 5. { IF EXECUTABLES ARE UNDER ORACLE AGREEMENT AS OPPOSED TO THE EPL, INSERT THE FOLLOWING} These files are licensed in executable form under your Oracle license agreement. Oracle is solely responsible for any representations and warranties contained therein. Copyright (c) 2017,2019 Oracle and/or its affiliates. All rights reserved. Eclipse Public License - v 2.0 - See Appendix Y --- Fourth Party Dependencies --- "jersey-core-common" (org.glassfish.jersey.core:jersey-common) Copyright (c) 2007,2020 Oracle and/or its affiliates. All rights reserved. Copyright (c) 2018 Payara Foundation and/or its affiliates. Copyright (C) 2006,2014 The Guava Authors EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "jakarta.ws.rs-api" (jakarta.ws.rs:jakarta.ws.rs-api) Copyright (c) 2010,2019 Oracle and/or its affiliates. All rights reserved. Copyright (c) 2006 Google Inc.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "Jakarta Annotations API" (jakarta.annotation:jakarta.annotation-api) Copyright (c) 2005,2018 Oracle and/or its affiliates. All rights reserved. Copyright © 2019 Eclipse Foundation. All rights reserved. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "OSGi resource locator" (org.glassfish.hk2:osgi-resource-locator) Copyright (c) 2009,2018 Oracle and/or its affiliates. All rights reserved. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "javax.inject:1 as OSGi bundle" (org.glassfish.hk2.external:jakarta.inject) Copyright (C) 2009 The JSR-330 Expert Group Copyright (c) 2010,2018 Oracle and/or its affiliates. All rights reserved. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "JSON-P Default Provider" (org.glassfish:jakarta.json) "JSON-P API" (jakarta.json:jakarta.json-api) Copyright (c) 2011,2019 Oracle and/or its affiliates. All rights reserved. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "JSON-B API" (jakarta.json.bind:jakarta.json.bind-api) Copyright (c) 2015,2019 Oracle and/or its affiliates. All rights reserved. Copyright © 2019 Eclipse Foundation. All Rights Reserved. EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 --- "Jakarta Activation" (com.sun.activation:jakarta.activation) Copyright (c) 1997,2019 Oracle and/or its affiliates. All rights reserved. Eclipse Distribution License - v 1.0 Copyright (c) 2007, Eclipse Foundation, Inc. and its licensors. All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- "org.eclipse.yasson" (org.eclipse:yasson) Copyright (c) 2019 IBM and/or its affiliates. All rights reserved. Copyright (c) 2015,2019 Oracle and/or its affiliates. All rights reserved. Copyright (c) 2019 Payara Foundation and/or its affiliates. All rights reserved. Copyright (c) 2019 Payara Services and/or its affiliates. All rights reserved. Eclipse Public License v. 2.0, Eclipse Distribution License v. 1.0 ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Eclipse Foundation	Jetty 9.4.43.V20210629 Jetty 9.4.48.v20220622	This program and the accompanying materials are made available under the terms of the Eclipse Public License 1.0 which is available at https://www.eclipse.org/org/documents/epl-1.0/EPL-1.0.txt or the Apache Software License 2.0 which is available at https://www.apache.org/licenses/LICENSE-2.0 Oracle elects the Apache Software License 2.0 in all instances where it is available for this component. ========== ========== Notice.txt Notices for Eclipse Jetty ========== This content is produced and maintained by the Eclipse Jetty project. Project home: https://www.eclipse.org/jetty/ Trademarks ---------- Eclipse Jetty, and Jetty are trademarks of the Eclipse Foundation. Copyright --------- All contributions are the property of the respective authors or of entities to which copyright has been assigned by the authors (eg. employer). Declared Project Licenses ---------- This artifacts of this project are made available under the terms of: * the Eclipse Public License v. 1.0 http://www.eclipse.org/legal/epl-v10.html SPDX-License-Identifier: EPL-1.0 or * the Apache License, Version 2.0 https://www.apache.org/licenses/LICENSE-2.0. SPDX-License-Identifier: Apache-2.0 The following dependencies are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following dependencies are EPL and ASL2.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* org.eclipse.jetty.orbit:javax.security.auth.message The following dependencies are EPL and CDDL 1.0. * org.eclipse.jetty.orbit:javax.mail.glassfish If ALPN is used to negotiate HTTP/2 connections, then the following distribution may be included in the distribution or downloaded when ALPN module is selected. These artifacts replace/ modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions. http://openjdk.java.net/legal/gplv2+ce.html * java.sun.security.ssl The following dependencies are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html * org.ow2.asm:asm-commons * org.ow2.asm:asm The following dependencies are ASL2 licensed. * org.apache.taglibs:taglibs-standard-spec * org.apache.taglibs:taglibs-standard-impl The following dependencies are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. * org.mortbay.jasper:apache-jsp * org.apache.tomcat:tomcat-jasper * org.apache.tomcat:tomcat-juli * org.apache.tomcat:tomcat-jsp-api * org.apache.tomcat:tomcat-el-api * org.apache.tomcat:tomcat-jasper-el * org.apache.tomcat:tomcat-api * org.apache.tomcat:tomcat-util-scan * org.apache.tomcat:tomcat-util * org.mortbay.jasper:apache-el * org.apache.tomcat:tomcat-jasper-el * org.apache.tomcat:tomcat-el-api The following artifacts are CDDL + GPLv2 with classpath exception. https://glassfish.dev.java.net/nonav/public/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		CDDL+GPL.html * org.eclipse.jetty.toolchain:jetty-schemas Cryptography ---------- Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. ========== https://asm.ow2.io/license.html License ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Eclipse Foundation	Jetty 9.4.42.v20210604	This program and the accompanying materials are made available under the terms of the Eclipse Public License 1.0 which is available at https://www.eclipse.org/org/documents/epl-1.0/EPL-1.0.txt or the Apache Software License 2.0 which is available at https://www.apache.org/licenses/LICENSE-2.0 Oracle elects the Apache Software License 2.0 in all instances where it is available for this component. ========== ========== Notice.txt Notices for Eclipse Jetty ========== This content is produced and maintained by the Eclipse Jetty project. Project home: https://www.eclipse.org/jetty/ Trademarks ---------- Eclipse Jetty, and Jetty are trademarks of the Eclipse Foundation. Copyright --------- All contributions are the property of the respective authors or of entities to which copyright has been assigned by the authors (eg. employer). Declared Project Licenses ---------- This artifacts of this project are made available under the terms of: * the Eclipse Public License v. 1.0 http://www.eclipse.org/legal/epl-v10.html SPDX-License-Identifier: EPL-1.0 or * the Apache License, Version 2.0 https://www.apache.org/licenses/LICENSE-2.0. SPDX-License-Identifier: Apache-2.0 The following dependencies are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message The following dependencies are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html * org.ow2.asm:asm-commons * org.ow2.asm:asm The following dependencies are ASL2 licensed. * org.apache.taglibs:taglibs-standard-spec * org.apache.taglibs:taglibs-standard-impl

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The following dependencies are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. * org.mortbay.jasper:apache-jsp * org.apache.tomcat:tomcat-jasper * org.apache.tomcat:tomcat-juli * org.apache.tomcat:tomcat-jsp-api * org.apache.tomcat:tomcat-el-api * org.apache.tomcat:tomcat-jasper-el * org.apache.tomcat:tomcat-api * org.apache.tomcat:tomcat-util-scan * org.apache.tomcat:tomcat-util * org.mortbay.jasper:apache-el * org.apache.tomcat:tomcat-jasper-el * org.apache.tomcat:tomcat-el-api Cryptography ---------- Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Eclipse Foundation	Jetty 9.4.30.v20200611	This program and the accompanying materials are made available under the terms of the Eclipse Public License 1.0 which is available at https://www.eclipse.org/org/documents/epl-1.0/EPL-1.0.txt or the Apache Software License 2.0 which is available at https://www.apache.org/licenses/LICENSE-2.0 EPL License 1.0, refer Appendix J APACHE 2.0 - See Appendix E Notices for Eclipse Jetty ========== This content is produced and maintained by the Eclipse Jetty project. Project home: https://www.eclipse.org/jetty/ Trademarks ---------- Eclipse Jetty, and Jetty are trademarks of the Eclipse Foundation. Copyright --------- All contributions are the property of the respective authors or of entities to which copyright has been assigned by the authors (eg. employer). Declared Project Licenses ---------- This artifacts of this project are made available under the terms of: * the Eclipse Public License v. 1.0 http://www.eclipse.org/legal/epl-v10.html SPDX-License-Identifier: EPL-1.0 or * the Apache License, Version 2.0 https://www.apache.org/licenses/LICENSE-2.0. SPDX-License-Identifier: Apache-2.0 The following dependencies are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following dependencies are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message The following dependencies are EPL and CDDL 1.0. * org.eclipse.jetty.orbit:javax.mail.glassfish The following dependencies are CDDL + GPLv2 with classpath exception. https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html * javax.servlet:javax.servlet-api

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* javax.annotation:javax.annotation-api * javax.transaction:javax.transaction-api * javax.websocket:javax.websocket-api If ALPN is used to negotiate HTTP/2 connections, then the following distribution may be included in the distribution or downloaded when ALPN module is selected. These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions. http://openjdk.java.net/legal/gplv2+ce.html * java.sun.security.ssl The following dependencies are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html * org.ow2.asm:asm-commons * org.ow2.asm:asm The following dependencies are ASL2 licensed. * org.apache.taglibs:taglibs-standard-spec * org.apache.taglibs:taglibs-standard-impl The following dependencies are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. * org.mortbay.jasper:apache-jsp * org.apache.tomcat:tomcat-jasper * org.apache.tomcat:tomcat-juli * org.apache.tomcat:tomcat-jsp-api * org.apache.tomcat:tomcat-el-api * org.apache.tomcat:tomcat-jasper-el * org.apache.tomcat:tomcat-api * org.apache.tomcat:tomcat-util-scan * org.apache.tomcat:tomcat-util * org.mortbay.jasper:apache-el * org.apache.tomcat:tomcat-jasper-el * org.apache.tomcat:tomcat-el-api The following artifacts are CDDL + GPLv2 with classpath exception. https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html * org.eclipse.jetty.toolchain:jetty-schemas Cryptography ---------- Content may contain encryption software. The country in which you are currently may have restrictions on the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. ---------- ############4th party dependencies########################## org.ow2.asm asm / asm-common / asm-tree / asm-analysis 7.0 COPYRIGHT and LICENSE: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M ---------- FOURTH-PARTY DEPENDENCY #2 org.ow2.asm:asm 7.3.1 FOURTH-PARTY DEPENDENCY #2 LICENSE of org.ow2.asm:asm component License ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M ==========End of LICENSE of org.ow2.asm:asm component component========== ========== --- org.mortbay.jasper apache-jsp 9.0.29 COPYRIGHT: Mort Bay Consulting LICENSE: Apache 2.0 same as top-level license text above.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

		--- 	
		org.apache.taglibs taglibs-standard-imp 1.2.5
		org.apache.taglibs taglibs-standard-spec 1.2.5
		COPYRIGHT: Copyright © 2001-2015 The Apache Software Foundation. All Rights Reserved.
		LICENSE: Apache 2.0 https://www.apache.org/licenses/LICENSE-2.0
		same as top-level license text above.
		--- 	
		org.eclipse.jetty.toolchain jetty-perf-helper 1.0.5
		COPYRIGHT and LICENSE:
		// Copyright (c) 1995-2014 Mort Bay Consulting Pty. Ltd.
		//
		---------- 	
		// All rights reserved. This program and the accompanying materials
		// are made available under the terms of the Eclipse Public License v1.0 // and Apache License v2.0 which accompanies this distribution.
		//
		// The Eclipse Public License is available at
		// http://www.eclipse.org/legal/epl-v10.html
		// // The Apache License v2.0 is available at
		// http://www.opensource.org/licenses/apache2.0.php
		//
		// You may elect to redistribute this code under either of these licenses.
		same as top-level license text above.
		--- 	
		org.slf4j jcl104-over-slf4j 1.7.25
		org.slf4j log4j-over-slf4j 1.7.25
		org.slf4j slf4j-api 1.7.25
		org.slf4j slf4j-simple 1.7.25
		COPYRIGHT and LICENSE:
		Copyright (c) 2004-2017 QOS.ch
		All rights reserved.
		See Appendix G
		---------- 	
		org.jboss.logging 3.3.2.Final
		COPYRIGHT: Copyright 2010 Red Hat, Inc.
		LICENSE: Apache 2.0 https://github.com/jboss-logging/jboss-logging/blob/3.3.2.Final/src/main/resources/META-INF/LICENSE.txt
		same as top-level license text above.
		--- 	

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		com.github.jnr jnr-unixsocket 0.24 COPYRIGHT: Copyright (C) 2016 Fritz Elfert Copyright (C) 2009 Wayne Meissner Copyright (C) 2016 Marcus Linke Copyright (C) 2014 Greg Vanore LICENSE: Apache 2.0 Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. same as top-level license text above. --- org.infinispan » infinispan-core 9.4.8.Final org.infinispan » infinispan-query 9.4.8.Final org.infinispan » infinispan-client-hotrod 9.4.8.Final org.infinispan » infinispan-remote-query-client 9.4.8.Final Copyright The Infinispan Project Team LICENSE: Apache 2.0 https://github.com/infinispan/infinispan/blob/9.4.8.Final/LICENSE.md same as top-level license text above. --- org.springframework » spring-beans 5.1.1.RELEASE COPYRIGHT: Copyright (c) 2002-2020 Pivotal, Inc. LICENSE: Apache 2.0 The Spring Framework is released under version 2.0 of the Apache License. same as top-level license text above. --- com.hazelcast » hazelcast 3.12.6 com.hazelcast » hazelcast-client 3.12.6 LICENSE: Apache 2.0 https://github.com/hazelcast/hazelcast/blob/v3.9.4/LICENSE /

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* * Copyright (c) 2008-2020, Hazelcast, Inc. All Rights Reserved. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ same as top-level license text above. === --- org.conscrypt, v2.4.0, Apache 2.0 COPYRIGHT and LICENSE: Copyright 2016 The Android Open Source Project Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== = org.json:json, v20160810, The JSON License: * JSON in Java (org.json:json:20160810 - https://github.com/douglascrockford/JSON-java) Copyright (c) 2002 JSON.org See Appendix G ---------- Jackson, v2.9.9, Apache 2.0 Copyright © 2008–2019 FasterXML. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This copy of Jackson JSON processor streaming parser/ generator is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 NOTICE FILE: ========== # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers, as well as supported commercially by FasterXML.com. ## Licensing Jackson core and extension components may licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (http://fasterxml.com). ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ========== From the LICENSE file: For Apache License, see Appendix E --- Apache Taglibs For Apache License, see Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Eclipse Foundation	Jetty 9.4.40.v20210413 Jetty 9.4.43.V20210629	TOP-LEVEL LICENSE TEXT Jetty 9.4.40.v20210413 This program and the accompanying materials are made available under the terms of the Eclipse Public License 1.0 which is available at https://www.eclipse.org/org/documents/epl-1.0/EPL-1.0.txt or the Apache Software License 2.0 which is available at https://www.apache.org/licenses/LICENSE-2.0 Oracle elects the Apache 2.0 license For Apache License, see Appendix E ---------separator--------- TOP-LEVEL NOTICE TEXT Notice.txt Notices for Eclipse Jetty ========== This content is produced and maintained by the Eclipse Jetty project. Project home: https://www.eclipse.org/jetty/ Trademarks ---------- Eclipse Jetty, and Jetty are trademarks of the Eclipse Foundation. Copyright --------- All contributions are the property of the respective authors or of entities to which copyright has been assigned by the authors (eg. employer). Declared Project Licenses ---------- This artifacts of this project are made available under the terms of: * the Eclipse Public License v. 1.0 http://www.eclipse.org/legal/epl-v10.html SPDX-License-Identifier: EPL-1.0 or * the Apache License, Version 2.0 https://www.apache.org/licenses/LICENSE-2.0. SPDX-License-Identifier: Apache-2.0 The following dependencies are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following dependencies are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message The following dependencies are EPL and CDDL 1.0. * org.eclipse.jetty.orbit:javax.mail.glassfish If ALPN is used to negotiate HTTP/2 connections, then the following distribution may be included in the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		distribution or downloaded when ALPN module is selected. These artifacts replace/modify OpenJDK classes. The modifications are hosted at github and both modified and original are under GPL v2 with classpath exceptions. http://openjdk.java.net/legal/gplv2+ce.html * java.sun.security.ssl The following dependencies are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html * org.ow2.asm:asm-commons * org.ow2.asm:asm The following dependencies are ASL2 licensed. * org.apache.taglibs:taglibs-standard-spec * org.apache.taglibs:taglibs-standard-impl The following dependencies are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. * org.mortbay.jasper:apache-jsp * org.apache.tomcat:tomcat-jasper * org.apache.tomcat:tomcat-juli * org.apache.tomcat:tomcat-jsp-api * org.apache.tomcat:tomcat-el-api * org.apache.tomcat:tomcat-jasper-el * org.apache.tomcat:tomcat-api * org.apache.tomcat:tomcat-util-scan * org.apache.tomcat:tomcat-util * org.mortbay.jasper:apache-el * org.apache.tomcat:tomcat-jasper-el * org.apache.tomcat:tomcat-el-api The following artifacts are CDDL + GPLv2 with classpath exception. https://glassfish.dev.java.net/nonav/public/CDDL+GPL.html * org.eclipse.jetty.toolchain:jetty-schemas Cryptography ---------- Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. ========== https://asm.ow2.io/license.html License ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.eclipse.jetty.http2:http2-http-client-transport:9.4.40.v20210413 FOURTH-PARTY DEPENDENCY #2 org.eclipse.jetty:jetty-client:9.4.40.v20210413 FOURTH-PARTY DEPENDENCY #3 org.eclipse.jetty:jetty-http:9.4.40.v20210413 FOURTH-PARTY DEPENDENCY #4 org.eclipse.jetty:jetty-util:9.4.40.v20210413 FOURTH-PARTY DEPENDENCY #5 org.eclipse.jetty:jetty-io:9.4.40.v20210413 FOURTH-PARTY DEPENDENCY #6 org.eclipse.jetty.http2:http2-client:9.4.40.v20210413 FOURTH-PARTY DEPENDENCY #7 org.eclipse.jetty.http2:http2-common:9.4.40.v20210413 FOURTH-PARTY DEPENDENCY #8 org.eclipse.jetty.http2:http2-hpack:9.4.40.v20210413 FOURTH-PARTY DEPENDENCY #9 org.eclipse.jetty:jetty-alpn-client:9.4.40.v20210413 FOURTH-PARTY DEPENDENCY #10 org.eclipse.jetty:jetty-alpn-java-client:9.4.40.v20210413 License text and Notice is same as Top level license text and notice

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Eclipse	Jetty 11.0.7 Jetty 11.0.11	Notices for Eclipse Jetty ========== This content is produced and maintained by the Eclipse Jetty project. Project home: https://www.eclipse.org/jetty/ Trademarks ---------- Eclipse Jetty, and Jetty are trademarks of the Eclipse Foundation. Copyright --------- All contributions are the property of the respective authors or of entities to which copyright has been assigned by the authors (eg. employer). Declared Project Licenses ---------- This artifacts of this project are made available under the terms of: * the Eclipse Public License v2.0 https://www.eclipse.org/legal/epl-2.0 SPDX-License-Identifier: EPL-2.0 or * the Apache License, Version 2.0 https://www.apache.org/licenses/LICENSE-2.0 SPDX-License-Identifier: Apache-2.0 For Apache License, see Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.eclipse.jetty.http2:http2-http-client-transport:11.0.11 -- Apache , EPL FOURTH-PARTY DEPENDENCY #2 org.eclipse.jetty:jetty-client:11.0.11 -- Apache , EPL FOURTH-PARTY DEPENDENCY #3 org.eclipse.jetty:jetty-http:11.0.11 -- Apache , EPL FOURTH-PARTY DEPENDENCY #4 org.eclipse.jetty:jetty-util:11.0.11 -- Apache , EPL FOURTH-PARTY DEPENDENCY #5 org.eclipse.jetty:jetty-io:11.0.11 -- Apache ,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		EPL FOURTH-PARTY DEPENDENCY #6 org.eclipse.jetty:jetty-alpn-client:11.0.11 -- Apache , EPL FOURTH-PARTY DEPENDENCY #7 org.eclipse.jetty.http2:http2-client:11.0.11 -- Apache , EPL FOURTH-PARTY DEPENDENCY #8 org.eclipse.jetty.http2:http2-common:11.0.11 -- Apache , EPL FOURTH-PARTY DEPENDENCY #9 org.eclipse.jetty.http2:http2-hpack:11.0.11 -- Apache , EPL FOURTH-PARTY DEPENDENCY #10 org.eclipse.jetty:jetty-alpn-java-client:11.0.11 -- Apache , EPL Copyright and license same as TEXT mentioned under TOP-LEVEL License Text ---------separator--------- FOURTH-PARTY DEPENDENCY #11 org.slf4j:slf4j-api:2.0.0-alpha5 -> 1.7.36 -- MIT Copyright (c) 2004-2017 QOS.ch See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Jetty	Jetty ReactiveStream HttpClient 1.1.10 Jetty ReactiveStream HttpClient 1.1.12	TOP-LEVEL LICENSE TEXT for org.eclipse.jetty:jetty-reactive-httpclient:1.1.10 For Apache License, see Appendix E FOURTH-PARTY DEPENDENCY #1 org.reactivestreams:reactive-streams 1.0.3 COPYRIGHT NOTICES / ********** * Licensed under Public Domain (CC0) * * * * To the extent possible under law, the person who associated CC0 with * * this code has waived all copyright and related or neighboring * * rights to this code. * * * * You should have received a copy of the CC0 legalcode along with this * * work. If not, see .* **********/ FOURTH-PARTY DEPENDENCY #1 LICENSE No Copyright The person who associated a work with this deed has dedicated the work to the public domain by waiving all of his or her rights to the work worldwide under copyright law, including all related and neighboring rights, to the extent allowed by law. You can copy, modify, distribute and perform the work, even for commercial purposes, all without asking permission. See Other Information below. This license is acceptable for Free Cultural Works. Other Information In no way are the patent or trademark rights of any person affected by CC0, nor are the rights that other persons may have in the work or in how the work is used, such as publicity or privacy rights. Unless expressly stated otherwise, the person who associated a work with this deed makes no warranties about the work, and disclaims liability for all uses of the work, to the fullest extent permitted by applicable law. When using or citing the work, you should not imply endorsement by the author or the affirmer. ---------seperator--------- FOURTH-PARTY DEPENDENCY #2 org.eclipse.jetty:jetty-client 9.4.40.v20210413

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

| Provider | Component (s) | Licensing Information |
|---|---|==========
==========
Jetty Web Container
Copyright 1995-2019 Mort Bay Consulting Pty Ltd.
==========
==========

The Jetty Web Container is Copyright Mort Bay Consulting Pty Ltd
unless otherwise noted.

Jetty is dual licensed under both

* The Apache 2.0 License
http://www.apache.org/licenses/LICENSE-2.0.html

and

* The Eclipse Public 1.0 License
http://www.eclipse.org/legal/epl-v10.html

Jetty may be distributed under either license.

Text available in above links are represented below.

Eclipse

The following artifacts are EPL.
* org.eclipse.jetty.orbit:org.eclipse.jdt.core

The following artifacts are EPL and ASL2.
*
org.eclipse.jetty.orbit:javax.security.auth.message

The following artifacts are EPL and CDDL 1.0.
* org.eclipse.jetty.orbit:javax.mail.glassfish

OW2

The following artifacts are licensed by the
OW2 Foundation according to the
terms of http://asm.ow2.org/license.html

org.ow2.asm:asm-commons
org.ow2.asm:asm

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M ------ Apache The following artifacts are ASL2 licensed. org.apache.taglibs:taglibs-standard-spec org.apache.taglibs:taglibs-standard-impl ------ MortBay The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. org.mortbay.jasper:apache-jsp org.apache.tomcat:tomcat-jasper org.apache.tomcat:tomcat-juli org.apache.tomcat:tomcat-jsp-api org.apache.tomcat:tomcat-el-api org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-api org.apache.tomcat:tomcat-util-scan org.apache.tomcat:tomcat-util org.mortbay.jasper:apache-el org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-el-api ------ Assorted The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. ---------- Eclipse Public License - v 1.0 THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS ECLIPSE PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT. EPL License 1.0, refer Appendix J ---------separator--------- FOURTH-PARTY DEPENDENCY #3 org.slf4j:slf4j-api 1.7.30 COMMON COPYRIGHT NOTICES and LICENSE TEXT MIT License See Appendix G ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Jetty	Jetty ReactiveStream HttpClient 1.1.9	TOP-LEVEL LICENSE TEXT for org.eclipse.jetty:jetty-reactive-httpclient:1.1.9 For Apache License, see Appendix E FOURTH-PARTY DEPENDENCY #1 org.reactivestreams:reactive-streams 1.0.3 COPYRIGHT NOTICES / ********** * Licensed under Public Domain (CC0) * * * * To the extent possible under law, the person who associated CC0 with * * this code has waived all copyright and related or neighboring * * rights to this code. * * * * You should have received a copy of the CC0 legalcode along with this * * work. If not, see .* **********/ FOURTH-PARTY DEPENDENCY #1 LICENSE No Copyright The person who associated a work with this deed has dedicated the work to the public domain by waiving all of his or her rights to the work worldwide under copyright law, including all related and neighboring rights, to the extent allowed by law. You can copy, modify, distribute and perform the work, even for commercial purposes, all without asking permission. See Other Information below. This license is acceptable for Free Cultural Works. Other Information In no way are the patent or trademark rights of any person affected by CC0, nor are the rights that other persons may have in the work or in how the work is used, such as publicity or privacy rights. Unless expressly stated otherwise, the person who associated a work with this deed makes no warranties about the work, and disclaims liability for all uses of the work, to the fullest extent permitted by applicable law. When using or citing the work, you should not imply endorsement by the author or the affirmer. ---------seperator--------- FOURTH-PARTY DEPENDENCY #2 org.eclipse.jetty:jetty-client 9.4.40.v20210413

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== Jetty Web Container Copyright 1995-2019 Mort Bay Consulting Pty Ltd. ========== ========== The Jetty Web Container is Copyright Mort Bay Consulting Pty Ltd unless otherwise noted. Jetty is dual licensed under both * The Apache 2.0 License http://www.apache.org/licenses/LICENSE-2.0.html and * The Eclipse Public 1.0 License http://www.eclipse.org/legal/epl-v10.html Jetty may be distributed under either license. Text available in above links are represented below. ------ Eclipse The following artifacts are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following artifacts are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message The following artifacts are EPL and CDDL 1.0. * org.eclipse.jetty.orbit:javax.mail.glassfish ------ OW2 The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html org.ow2.asm:asm-commons org.ow2.asm:asm

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M ------ Apache The following artifacts are ASL2 licensed. org.apache.taglibs:taglibs-standard-spec org.apache.taglibs:taglibs-standard-impl ------ MortBay The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. org.mortbay.jasper:apache-jsp org.apache.tomcat:tomcat-jasper org.apache.tomcat:tomcat-juli org.apache.tomcat:tomcat-jsp-api org.apache.tomcat:tomcat-el-api org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-api org.apache.tomcat:tomcat-util-scan org.apache.tomcat:tomcat-util org.mortbay.jasper:apache-el org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-el-api ------ Assorted The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. ---------- Eclipse Public License - v 1.0 THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS ECLIPSE PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT. EPL License 1.0, refer Appendix J ---------separator--------- FOURTH-PARTY DEPENDENCY #3 org.slf4j:slf4j-api 1.7.30 COMMON COPYRIGHT NOTICES and LICENSE TEXT MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Jetty	Jetty ReactiveStream HttpClient 1.1.8	/* * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator--------- org.reactivestreams:reactive-streams / ********** * Licensed under Public Domain (CC0) * * * * To the extent possible under law, the person who associated CC0 with * * this code has waived all copyright and related or neighboring * * rights to this code. * * * * You should have received a copy of the CC0 legalcode along with this * * work. If not, see <http://creativecommons.org/publicdomain/zero/1.0/>.* **********/ No Copyright The person who associated a work with this deed has dedicated the work to the public domain by waiving all of his or her rights to the work worldwide under copyright law, including all related and neighboring rights, to the extent allowed by law. You can copy, modify, distribute and perform the work, even for commercial purposes, all without asking permission. See Other Information below.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This license is acceptable for Free Cultural Works. Other Information In no way are the patent or trademark rights of any person affected by CC0, nor are the rights that other persons may have in the work or in how the work is used, such as publicity or privacy rights. Unless expressly stated otherwise, the person who associated a work with this deed makes no warranties about the work, and disclaims liability for all uses of the work, to the fullest extent permitted by applicable law. When using or citing the work, you should not imply endorsement by the author or the affirmer. ---------seperator--------- org.eclipse.jetty:jetty-client ========== Jetty Web Container Copyright 1995-2019 Mort Bay Consulting Pty Ltd. ========== The Jetty Web Container is Copyright Mort Bay Consulting Pty Ltd unless otherwise noted. Jetty is dual licensed under both * The Apache 2.0 License http://www.apache.org/licenses/LICENSE-2.0.html and * The Eclipse Public 1.0 License http://www.eclipse.org/legal/epl-v10.html Jetty may be distributed under either license. Text available in above links are represented below. Oracle elects the Apache 2.0 License. ------ Eclipse The following artifacts are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following artifacts are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message ------ OW2 The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html org.ow2.asm:asm-commons org.ow2.asm:asm

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M Apache The following artifacts are ASL2 licensed. org.apache.taglibs:taglibs-standard-spec org.apache.taglibs:taglibs-standard-impl ------ MortBay The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. org.mortbay.jasper:apache-jsp org.apache.tomcat:tomcat-jasper org.apache.tomcat:tomcat-juli org.apache.tomcat:tomcat-jsp-api org.apache.tomcat:tomcat-el-api org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-api org.apache.tomcat:tomcat-util-scan org.apache.tomcat:tomcat-util org.mortbay.jasper:apache-el org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-el-api ------ Assorted The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. ---------separator--------- org.slf4j:slf4j-api The MIT License (MIT) Copyright (c) 2004-2017 QOS.ch MIT License, refer Appendix G ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		APACHE 2.0 - See Appendix E EPL License 1.0, refer Appendix J

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Jetty	Jetty ReactiveStream HttpClient 3.0.4	TOP-LEVEL COPYRIGHT NOTICE for org.eclipse.jetty:jetty-reactive-httpclient:1.1.10 /* * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator--------- TOP-LEVEL LICENSE TEXT for org.eclipse.jetty:jetty-reactive-httpclient:1.1.10 APACHE 2.0 - See Appendix E END OF TERMS AND CONDITIONS ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.reactivestreams:reactive-streams 1.0.3 COPYRIGHT NOTICES / ********** ******** * Licensed under Public Domain (CC0) * * * * To the extent possible under law, the person who associated CC0 with * * this code has waived all copyright and related or neighboring * * rights to this code. * * * * You should have received a copy of the CC0 legalcode along with this *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* work. If not, see <http://creativecommons.org/publicdomain/zero/1.0/>.* ********** ********/ FOURTH-PARTY DEPENDENCY #1 LICENSE No Copyright The person who associated a work with this deed has dedicated the work to the public domain by waiving all of his or her rights to the work worldwide under copyright law, including all related and neighboring rights, to the extent allowed by law. You can copy, modify, distribute and perform the work, even for commercial purposes, all without asking permission. See Other Information below. This license is acceptable for Free Cultural Works. Other Information In no way are the patent or trademark rights of any person affected by CC0, nor are the rights that other persons may have in the work or in how the work is used, such as publicity or privacy rights. Unless expressly stated otherwise, the person who associated a work with this deed makes no warranties about the work, and disclaims liability for all uses of the work, to the fullest extent permitted by applicable law. When using or citing the work, you should not imply endorsement by the author or the affirmer. ---------seperator--------- FOURTH-PARTY DEPENDENCY #2 org.eclipse.jetty:jetty-client 9.4.43.v20210629 ========== ========== Jetty Web Container Copyright 1995-2021 Mort Bay Consulting Pty Ltd. ========== ========== The Jetty Web Container is Copyright Mort Bay Consulting Pty Ltd unless otherwise noted. Jetty is dual licensed under both * The Apache 2.0 License http://www.apache.org/licenses/LICENSE-2.0.html and * The Eclipse Public 1.0 License http://www.eclipse.org/legal/epl-v10.html

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Jetty may be distributed under either license. Oracle elects the Apache 2.0 license. Text available in above links are represented below. ------ Eclipse The following artifacts are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following artifacts are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message ------ OW2 The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html org.ow2.asm:asm-commons org.ow2.asm:asm ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M ------ Apache The following artifacts are ASL2 licensed. org.apache.taglibs:taglibs-standard-spec org.apache.taglibs:taglibs-standard-impl ------ MortBay The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. org.mortbay.jasper:apache-jsp org.apache.tomcat:tomcat-jasper org.apache.tomcat:tomcat-juli org.apache.tomcat:tomcat-jsp-api org.apache.tomcat:tomcat-el-api org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-api

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.apache.tomcat:tomcat-util-scan org.apache.tomcat:tomcat-util org.mortbay.jasper:apache-el org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-el-api ------ Assorted The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. ---------- Eclipse Public License - v 1.0 APACHE 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #3 org.slf4j:slf4j-api 1.7.32 COMMON COPYRIGHT NOTICES and LICENSE TEXT MIT License See Appendix G ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Jetty	Jetty ReactiveStream HttpClient 3.0.6	TOP-LEVEL COPYRIGHT NOTICE for org.eclipse.jetty:jetty-reactive-httpclient:3.0.4 /* * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator--------- TOP-LEVEL LICENSE TEXT for org.eclipse.jetty:jetty-reactive-httpclient:3.0.4 APACHE 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.reactivestreams:reactive-streams 1.0.3 COPYRIGHT NOTICES / ********** ******** * Licensed under Public Domain (CC0) * * * * To the extent possible under law, the person who associated CC0 with * * this code has waived all copyright and related or neighboring * * rights to this code. * * * * You should have received a copy of the CC0 legalcode along with this * * work. If not, see <http://creativecommons.org/publicdomain/zero/1.0/>.*

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		********** ********/ FOURTH-PARTY DEPENDENCY #1 LICENSE No Copyright The person who associated a work with this deed has dedicated the work to the public domain by waiving all of his or her rights to the work worldwide under copyright law, including all related and neighboring rights, to the extent allowed by law. You can copy, modify, distribute and perform the work, even for commercial purposes, all without asking permission. See Other Information below. This license is acceptable for Free Cultural Works. Other Information In no way are the patent or trademark rights of any person affected by CC0, nor are the rights that other persons may have in the work or in how the work is used, such as publicity or privacy rights. Unless expressly stated otherwise, the person who associated a work with this deed makes no warranties about the work, and disclaims liability for all uses of the work, to the fullest extent permitted by applicable law. When using or citing the work, you should not imply endorsement by the author or the affirmer. ---------seperator--------- FOURTH-PARTY DEPENDENCY #2 org.eclipse.jetty:jetty-client 11.0.7 ========== ========== Jetty Web Container Copyright 1995-2021 Mort Bay Consulting Pty Ltd. ========== ========== The Jetty Web Container is Copyright Mort Bay Consulting Pty Ltd unless otherwise noted. Jetty is dual licensed under both * The Apache 2.0 License http://www.apache.org/licenses/LICENSE-2.0.html and * The Eclipse Public 1.0 License http://www.eclipse.org/legal/epl-v10.html Jetty may be distributed under either license. Text available in above links are represented below.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		------ Eclipse The following artifacts are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following artifacts are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message ------ OW2 The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html org.ow2.asm:asm-commons org.ow2.asm:asm ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M ------ Apache The following artifacts are ASL2 licensed. org.apache.taglibs:taglibs-standard-spec org.apache.taglibs:taglibs-standard-impl ------ MortBay The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. org.mortbay.jasper:apache-jsp org.apache.tomcat:tomcat-jasper org.apache.tomcat:tomcat-juli org.apache.tomcat:tomcat-jsp-api org.apache.tomcat:tomcat-el-api org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-api org.apache.tomcat:tomcat-util-scan org.apache.tomcat:tomcat-util org.mortbay.jasper:apache-el org.apache.tomcat:tomcat-jasper-el

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.apache.tomcat:tomcat-el-api ------ Assorted The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. ---------- Eclipse Public License - v 1.0 ---------- APACHE 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #3 org.slf4j:slf4j-api 1.7.32 COMMON COPYRIGHT NOTICES and LICENSE TEXT MIT License See Appendix G ---------separator---------
Armin Ronacher	Jinja2 3.0.1	Copyright 2007 Pallets See Appendix M #########4th party dependencies########## MarkupSafe, v1.1.1, BSD Copyright 2010 Pallets See Appendix M
Armin Ronacher	Jinja2 2.11.2	Copyright 2007 Pallets See Appendix M #########4th party dependencies########## MarkupSafe, v1.1.1, BSD Copyright 2010 Pallets See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Jetty	jetty-reactive-httpclient 1.1.2	TOP-LEVEL COPYRIGHT NOTICE for org.eclipse.jetty:jetty-reactive-httpclient:1.1.2 /* * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ APACHE 2.0 - See Appendix E FOURTH-PARTY DEPENDENCY #1 org.reactivestreams:reactive-streams 1.0.3 COPYRIGHT NOTICES / ********** ******** * Licensed under Public Domain (CC0) * * * * To the extent possible under law, the person who associated CC0 with * * this code has waived all copyright and related or neighboring * * rights to this code. * * * * You should have received a copy of the CC0 legalcode along with this * * work. If not, see <http://creativecommons.org/publicdomain/zero/1.0/>.* ********** ********/ FOURTH-PARTY DEPENDENCY #1 LICENSE No Copyright The person who associated a work with this deed has dedicated the work to the public domain by waiving all of his or her rights to the work worldwide under copyright law, including all related and neighboring rights, to the extent allowed by law. You can copy, modify, distribute and perform the work, even for commercial purposes, all without asking permission. See Other Information below. This license is acceptable for Free Cultural Works. Other Information In no way are the patent or trademark rights of any person affected by CC0, nor are the rights that other persons may have in the work or in how the work is used, such as publicity or privacy rights. Unless expressly stated otherwise, the person who associated a work with this deed makes no warranties about the work, and disclaims liability for all uses of the work, to the fullest extent permitted by applicable law. When using or citing the work, you should not imply endorsement by the author or the affirmer. FOURTH-PARTY DEPENDENCY #2 org.eclipse.jetty:jetty-client 9.4.24.v20191120 ========== ========== Jetty Web Container Copyright 1995-2019 Mort Bay Consulting Pty Ltd. ========== ========== The Jetty Web Container is Copyright Mort Bay Consulting Pty Ltd unless otherwise noted. Jetty is dual licensed under both * The Apache

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		2.0 License http://www.apache.org/licenses/ LICENSE-2.0.html and * The Eclipse Public 1.0 License http://www.eclipse.org/legal/epl-v10.html Jetty may be distributed under either license.Text available in above links are represented below. ------ Eclipse The following artifacts are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following artifacts are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message The following artifacts are EPL and CDDL 1.0. * org.eclipse.jetty.orbit:javax.mail.glassfish ------ OW2 The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/ license.html org.ow2.asm:asm-commons org.ow2.asm:asm ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M ------ Apache The following artifacts are ASL2 licensed. org.apache.taglibs:taglibs-standard-spec org.apache.taglibs:taglibs-standard-impl ------ MortBay The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. org.mortbay.jasper:apache-jsp org.apache.tomcat:tomcat-jasper org.apache.tomcat:tomcat-juli org.apache.tomcat:tomcat-jsp-api org.apache.tomcat:tomcat-el-api org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-api org.apache.tomcat:tomcat-util-scan org.apache.tomcat:tomcat-util org.mortbay.jasper:apache-el org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-el-api ------ Assorted The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. EPL License 1.0, refer Appendix J APACHE 2.0 - See Appendix E MIT License, refer Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
jetty	jetty-reactive-httpclient 1.1.4	TOP-LEVEL COPYRIGHT NOTICE for org.eclipse.jetty:jetty-reactive-httpclient:1.1.2 /* * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator--------- TOP-LEVEL LICENSE TEXT for org.eclipse.jetty:jetty-reactive-httpclient:1.1.2 Apache License, Version 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.reactivestreams:reactive-streams 1.0.3 COPYRIGHT NOTICES / ********** ******** * Licensed under Public Domain (CC0) * * * * To the extent possible under law, the person who associated CC0 with * * this code has waived all copyright and related or neighboring * * rights to this code. * * * * You should have received a copy of the CC0 legalcode along with this * * work. If not, see <http://creativecommons.org/publicdomain/zero/1.0/>.* ********** ********/ FOURTH-PARTY DEPENDENCY #1 LICENSE No Copyright The person who associated a work with this deed has dedicated the work to the public domain by waiving all of his or her rights to the work worldwide under copyright law, including all related and neighboring rights, to the extent allowed by law. You can copy, modify, distribute and perform the work, even for commercial purposes, all without asking permission. See Other Information below. This license is acceptable for Free Cultural Works. Other Information In no way are the patent or trademark rights of any person affected by CC0, nor are the rights that other persons may have in the work or in how the work is used, such as publicity or privacy rights. Unless expressly stated otherwise, the person who associated a work with this deed makes no warranties about the work, and disclaims liability for all uses of the work, to the fullest extent permitted by applicable law. When using or citing the work, you

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		should not imply endorsement by the author or the affirmer. ---------seperator--------- FOURTH-PARTY DEPENDENCY #2 org.eclipse.jetty:jetty-client 9.4.24.v20191120 ========== ========== Jetty Web Container Copyright 1995-2019 Mort Bay Consulting Pty Ltd. ========== ========== The Jetty Web Container is Copyright Mort Bay Consulting Pty Ltd unless otherwise noted. Jetty is dual licensed under both * The Apache 2.0 License http://www.apache.org/licenses/LICENSE-2.0.html and * The Eclipse Public 1.0 License http://www.eclipse.org/legal/epl-v10.html Jetty may be distributed under either license. Text available in above links are represented below. ------ Eclipse The following artifacts are EPL. * org.eclipse.jetty.orbit:org.eclipse.jdt.core The following artifacts are EPL and ASL2. * org.eclipse.jetty.orbit:javax.security.auth.message The following artifacts are EPL and CDDL 1.0. * org.eclipse.jetty.orbit:javax.mail.glassfish ------ OW2 The following artifacts are licensed by the OW2 Foundation according to the terms of http://asm.ow2.org/license.html org.ow2.asm:asm-commons org.ow2.asm:asm ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M ------ Apache The following artifacts are ASL2 licensed. org.apache.taglibs:taglibs-standard-spec org.apache.taglibs:taglibs-standard-impl ------ MortBay The following artifacts are ASL2 licensed. Based on selected classes from following Apache Tomcat jars, all ASL2 licensed. org.mortbay.jasper:apache-jsp

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.apache.tomcat:tomcat-jasper org.apache.tomcat:tomcat-juli org.apache.tomcat:tomcat-jsp-api org.apache.tomcat:tomcat-el-api org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-api org.apache.tomcat:tomcat-util-scan org.apache.tomcat:tomcat-util org.mortbay.jasper:apache-el org.apache.tomcat:tomcat-jasper-el org.apache.tomcat:tomcat-el-api ------ Assorted The UnixCrypt.java code implements the one way cryptography used by Unix systems for simple password protection. Copyright 1996 Aki Yoshida, modified April 2001 by Iris Van den Broeke, Daniel Deville. Permission to use, copy, modify and distribute UnixCrypt for non-commercial or commercial purposes and without fee is granted provided that the copyright notice appears in all copies. ---------- Eclipse Public License - v 1.0 See Appendix J ---------- Apache License, Version 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #3 org.slf4j:slf4j-api 1.7.30 COMMON COPYRIGHT NOTICES and LICENSE TEXT MIT License See Appendix G ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
jsonwebtoken.io, Technology	jjwt 0.10.7 jjwt 0.11.5	TOP-LEVEL COMPONENTS: io.jsonwebtoken:jjwt-api:0.10.7 io.jsonwebtoken:jjwt-impl:0.10.7 io.jsonwebtoken:jjwt-jackson:0.10.7 COPYRIGHT NOTICE Copyright (C) 2019 jsonwebtoken.io This program is licensed to you under the Apache License Version 2.0, and you may not use this file except in compliance with the Apache License Version 2.0. You may obtain a copy of the Apache License Version 2.0 at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the Apache License Version 2.0 is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the Apache License Version 2.0 for the specific language governing permissions and limitations there under. Extract as it is from NOTICE.md : ## Base64 implementation JJWT's `io.jsonwebtoken.io.Base64` implementation is based on [MigBase64](https://github.com/brsanthu/migbase64) with continued modifications for Base64 URL support and additional test cases. The MigBase64 copyright and license notice have been retained and are repeated here per that code's requirements: Licence (BSD): ========== Copyright (c) 2004, Mikael Grev, MiG InfoCom AB. (base64 @ miginfocom . com) All rights reserved. BSD License- See Appendix N --- TOP-LEVEL LICENSE TEXT for io.jsonwebtoken:jjwt-api:0.10.7 io.jsonwebtoken:jjwt-impl:0.10.7 io.jsonwebtoken:jjwt-jackson:0.10.7 Apache License, Version 2.0 - See Appendix E --- FOURTH-PARTY DEPENDENCY #1 com.fasterxml.jackson.core:jackson-annotations:2.10.1 FOURTH-PARTY DEPENDENCY #1 COPYRIGHT NOTICES

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright © 2008–2017 FasterXML. All rights reserved. ---------- FOURTH-PARTY DEPENDENCY #2 com.fasterxml.jackson.core:jackson-core:2.10.1 FOURTH-PARTY DEPENDENCY #2 COPYRIGHT NOTICES Jackson JSON-processor. Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers, as well as supported commercially by FasterXML.com. ## Licensing Jackson core and extension components may licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (http://fasterxml.com). ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ---------- FOURTH-PARTY DEPENDENCY #3 com.fasterxml.jackson.core:jackson-databind:2.10.1 FOURTH-PARTY DEPENDENCY #3 COPYRIGHT NOTICES Copyright © 2008–2019 FasterXML. All rights reserved. ---------- FOURTH-PARTY DEPENDENCY #1 com.fasterxml.jackson.core:jackson-annotations:2.10.1 FOURTH-PARTY DEPENDENCY #2 com.fasterxml.jackson.core:jackson-core:2.10.1 FOURTH-PARTY DEPENDENCY #3 com.fasterxml.jackson.core:jackson-databind:2.10.1 COMMON LICENSE NOTICE Apache License, Version 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
jsonwebtoken.io	jjwt 0.11.2	Top Level Components and subcomponents: JJWT :: API (io.jsonwebtoken:jjwt-api) Copyright (C) 2014 jsonwebtoken.io JJWT :: Impl (io.jsonwebtoken:jjwt-impl) Copyright (C) 2014 jsonwebtoken.io JJWT :: Extensions :: Jackson (io.jsonwebtoken:jjwt-jackson) Copyright (C) 2014 jsonwebtoken.io JJWT :: Extensions :: Gson (io.jsonwebtoken:jjwt-gson) Copyright (C) 2014 jsonwebtoken.io JJWT :: Extensions :: org.json (io.jsonwebtoken:jjwt-orgjson) Copyright (C) 2014 jsonwebtoken.io APACHE 2.0 - See Appendix E ---------- JJWT's io.jsonwebtoken.io.Base64 implementation is based on MigBase64 with continued modifications for Base64 URL support and additional test cases. The MigBase64 copyright and license notice have been retained and are repeated here per that code's requirements: Licence (BSD): ========== Copyright (c) 2004, Mikael Grev, MiG InfoCom AB. (base64 @ miginfocom . com) All rights reserved. See Appendix M ---------- ********** FOURTH PARTY DEPENDENCIES ********** Jackson-annotations (com.fasterxml.jackson.core:jackson-annotations) Copyright (c) 2007- 2020 Tatu Saloranta, tatu.saloranta@iki.fi Jackson-core (com.fasterxml.jackson.core:jackson-core) Copyright (c) 2007-2020 Tatu Saloranta, tatu.saloranta@iki.fi jackson-databind (com.fasterxml.jackson.core:jackson-databind Copyright © 2008–2019 FasterXML. All rights reserved. Gson (com.google.code.gson:gson) LICENSE: Apache 2.0 license (SEE FULL TEXT ABOVE)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- ---------- ---------- ---------- JSON in Java (org.json:json) Copyright (c) 2002 JSON.org LICENSE: The JSON License See Appendix G ---------- ---------- bcprov-jdk15on (org.bouncycastle.bcprov-jdk15on) Copyright (c) 2000 - 2020 The Legion of the Bouncy Castle Inc. LICENSE: Bouncy Castle License See Appendix G
Joda.org	joda-time 2.10.10	APACHE 2.0 - See Appendix E Top Level Component : joda-time Top Level Component License : Apache 2.0 Top Level Component Copyright : Copyright Copyright 2001-2017 Stephen Colebourne

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Marc Prud'hommeaux	JLine 3.15.0	Copyright (c) 2002-2018, the original author or authors. All rights reserved. https://opensource.org/licenses/BSD-3-Clause See Appendix M 4th Party Dependency ========== org.fusesource.jansi version 1.18 org.apache.sshd 2.1 to 2.4 org.apache.felix.gogo.runtime 1.1.2 org.apache.felix.gogo.jline 1.1.4 ========== APACHE 2.0 - See Appendix E ========== juniversalchardet The library is subject to the Mozilla Public License Version 1.1. Alternatively, the library may be used under the terms of either the GNU General Public License Version 2 or later, or the GNU Lesser General Public License 2.1 or later. ========== slf4j SLF4J source code and binaries are distributed under the MIT license. Copyright (c) 2004-2017 QOS.ch All rights reserved. MIT License See Appendix G These terms are identical to those of the MIT License, also called the X License or the X11 License, which is a simple, permissive non-copyleft free software license. It is deemed compatible with virtually all types of licenses, commercial or otherwise. In particular, the Free Software Foundation has declared it compatible with GNU GPL. It is also known to be approved by the Apache Software Foundation as compatible with Apache Software License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
JS Foundation and other contributors	jQuery 3.6.0	Copyright JS Foundation and other contributors, https://js.foundation/ See Appendix G --- external/sizzle Copyright JS Foundation and other contributors, https://js.foundation/ This software consists of voluntary contributions made by many individuals. For exact contribution history, see the revision history available at https://github.com/jquery/sizzle The following license applies to all parts of this software except as documented below: ==== See Appendix G ==== All files located in the node_modules and external directories are externally maintained libraries used by this software which have their own licenses; we recommend you read them, as their terms may differ from the terms above.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
JSON.org	JSON-Java 20180813 JSON 20210307	Copyright (c) 2002 JSON.org Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: • The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. • The Software shall be used for Good, not Evil. See Appendix G
JSON.org	JSON-Java 20200518	URL for License – http://www.json.org/license.html Copyright (c) 2002 JSON.org See Appendix G
JSON.org	JSON in Java 20220320	https://github.com/stleary/JSON-java/blob/master/LICENSE --- Copyright (c) 2002 JSON.org See Appendix G
Jayway	JsonPath 2.4.0 JsonPath 2.6.0	son-path/JsonPath 2.4.0 COPYRIGHT and LICENSE: Copyright 2017 Jayway Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Everit Kft	JSON Schema 1.12.1	Copyright (C) 2011 Everit Kft. (http://www.everit.org) Licensed under the Apache License, Version 2.0 (the "License") APACHE 2.0 - See Appendix E 4 th -party dependencies: re2j/ The Go license/https://golang.org/LICENSE Copyright (c) 2009 The Go Authors. All rights reserved. See Appendix M Common-validator Apache Commons Validator Copyright 2001-2017 The Apache Software Foundation APACHE 2.0 - See Appendix E json 20160810 Copyright (c) 2002 JSON.org See Appendix G commons-beanutils 1.9.3 Apache Commons BeanUtils Copyright 2000-2016 The Apache Software Foundation APACHE 2.0 - See Appendix E handy-uri-templates 2.1.6 Copyright (c) 2012, Ryan J. McDonough All rights reserved. APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Everit Kft	JSON Schema 1.12.2 JSON Schema 1.14.1	JSON-Schema / License.txt Copyright (C) 2011 Everit Kft. (http://www.everit.org) Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- --- --- ---------- re2j/ The Go license/https://golang.org/LICENSE Copyright (c) 2009 The Go Authors. All rights reserved. See Appendix M --- --- --- ---------- Common-validator --notice-- Apache Commons Validator Copyright 2001-2017 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ---license.txt--- APACHE 2.0 - See Appendix E --- --- --- ---------- json 20160810 / Copyright Copyright (c) 2002 JSON.org See Appendix G --- --- --- ---------- commons-beanutils:commons-beanutils:1.9.3 ---Notice --- Apache Commons BeanUtils Copyright 2000-2016 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). --License -- APACHE 2.0 - See Appendix E --- --- --- ---------- com.damnhandy:handy-uri-templates:2.1.6 / -- Notice-- Copyright (c) 2012, Ryan J. McDonough All rights reserved. APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Go Authors	Golang 1.17.10-1.module+el8.6.0+20691+4e76a6d9	go.googlesource.com/go/src Copyright (c) 2009 The Go Authors. All rights reserved. See Appendix M -------- Patents Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed. ---------- Copyright Notices Copyright (c) 2009-2020 The Go Authors. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

		Copyright © 1994-1999 Lucent Technologies Inc. All rights reserved.
		
		Revisions Copyright © 2000-2007 Lucent Technologies Inc. and others
		
		Portions Copyright © 1995-1997 C H Forsyth (forsyth@terzarima.net)
		
		Portions Copyright © 2005-2007 C H Forsyth (forsyth@terzarima.net)
		
		Portions Copyright © 1997-1999 Vita Nuova Limited
		
		Portions Copyright © 2000-2008 Vita Nuova Holdings Limited (www.vitanuova.com)
		
		Portions Copyright © 2004,2006 Bruce Ellis
		
		Copyright (c) 1996-1998 John D. Polstra. All rights reserved.
		
		Copyright (c) 2001 David E. O'Brien
		
		This software is copyright (C) 1991-2011, Thomas G. Lane, Guido Vollbeding.
		
		Copyright (C) 1996, MPEG Software Simulation Group. All Rights Reserved. */
		
		Copyright (C) 1993 by Sun Microsystems, Inc. All rights reserved.
		
		Copyright 1984, 1987, 1989, 1992, 2000 by Stephen L. Moshier
		
		Copyright (C) 2004 by Sun Microsystems, Inc. All rights reserved.
		
		========== Dependencies ==========
		
		golang.org/x/net
		
		Copyright (c) 2009 The Go Authors. All rights reserved.
		
		// Copyright 2019 The Go Authors. All rights reserved.
		
		-------- 	
		
		golang.org/x/sys
		
		Copyright (c) 2009 The Go Authors. All rights reserved.
		
		// Copyright 2020 The Go Authors. All rights reserved.
		
		-------- 	
		
		golang.org/x/text
		
		Copyright (c) 2009 The Go Authors. All rights reserved.
		
		// Copyright 2019 The Go Authors. All rights reserved.
		
		-------- 	

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		golang.org/x/tools Copyright (c) 2009 The Go Authors. All rights reserved. // Copyright 2018 The Go Authors. All rights reserved. ---------- Dependency License---------- See Appendix M -------- Patents Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
	json-patch 1.12	json-patch 1.12 Copyright (c) 2014, Francis Galiegue (fgaliegue@gmail.com) This software is dual-licensed under: • the Lesser General Public License (LGPL) version 3.0 or, at your option, any later version; • the Apache Software License (ASL) version 2.0. Oracle elects Apache License v. 2.0 The text of this file and of both licenses is available at the root of this project or, if you have the jar distribution, in directory META-INF/, under the names LGPL-3.0.txt and ASL-2.0.txt respectively. Direct link to the sources: • LGPL 3.0: https://www.gnu.org/licenses/lgpl-3.0.txt • ASL 2.0: http://www.apache.org/licenses/LICENSE-2.0.txt APACHE 2.0 - See Appendix E _---------- Fourth Party Dependency _---------- jackson-databind 2.10.2 (Apache 2.0) Copyright This copy of Jackson JSON processor databind module is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 _---------- msg-simple 1.2 (Lesser General Public License, version 3 or greater, Apache Software License, version 2.0) This software is dual-licensed under: • the Lesser General Public License (LGPL) version 3.0 or, at your option, any later version; • the Apache Software License (ASL) version 2.0. Oracle elects Apache License v. 2.0 The text of this file and of both licenses is available at the root of this project or, if you have the jar distribution, in directory META-INF/, under the names LGPL-3.0.txt and ASL-2.0.txt respectively. Direct link to the sources: • LGPL 3.0: https://www.gnu.org/licenses/lgpl-3.0.txt

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

| Provider | Component (s) | Licensing Information |
|---|---|
• ASL 2.0: http://www.apache.org/licenses/LICENSE-2.0.txt
/*Copyright (c) 2014, Francis Galiegue (fgaliegue@gmail.com)
This software is dual-licensed under:
• the Lesser General Public License (LGPL) version 3.0 or, at your option, any later version;
• the Apache Software License (ASL) version 2.0.
Oracle elects Apache License v. 2.0
The text of this file and of both licenses is available at the root of this project or, if you have the jar distribution, in directory META-INF/, under the names LGPL-3.0.txt and ASL-2.0.txt respectively.
Direct link to the sources:
• LGPL 3.0: https://www.gnu.org/licenses/lgpl-3.0.txt
• ASL 2.0: http://www.apache.org/licenses/LICENSE-2.0.txt
*/
–----------
jackson-coreutils 1.12
This software is dual-licensed under:
• the Lesser General Public License (LGPL) version 3.0 or, at your option, any later version;
• the Apache Software License (ASL) version 2.0.
Oracle elects Apache License v. 2.0
The text of this file and of both licenses is available at the root of this project or, if you have the jar distribution, in directory META-INF/, under the names LGPL-3.0.txt and ASL-2.0.txt respectively.
Direct link to the sources:
• LGPL 3.0: https://www.gnu.org/licenses/lgpl-3.0.txt
• ASL 2.0: http://www.apache.org/licenses/LICENSE-2.0.txt
/*Copyright (c) 2014, Francis Galiegue (fgaliegue@gmail.com)
This software is dual-licensed under:
• the Lesser General Public License (LGPL) version 3.0 or, at your option, any later version;
• the Apache Software License (ASL) version 2.0.
Oracle elects Apache License v. 2.0
The text of this file and of both licenses is available at the root of this project or, if you have the jar distribution, in directory META-INF/, under the names LGPL-3.0.txt and ASL-2.0.txt respectively.
Direct link to the sources:
• LGPL 3.0: https://www.gnu.org/licenses/lgpl-3.0.txt
• ASL 2.0: http://www.apache.org/licenses/LICENSE-2.0.txt
*/
–---------- |

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		guava 28.2 (Apache License) /* Copyright © 2008 The Guava Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.*/ –---------- JSR305 3.0.2 (Apache License, Version 2.0) FindBugs - Find bugs in Java programs Copyright (C) 2005 Dave Brosius Copyright (C) 2005 University of Maryland This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Network New Technologies Inc.	json-schema-validator 1.0.59 json-schema-validator 1.0.73	========== copyright json-schema-validator ========== Copyright (c) 2020 Network New Technologies Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== NOTICE FILE Json-schema-validator ========== Copyright (c) 2019 Network New Technologies Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== Third Party Dependencies ========== ========== This project includes or depends on code from third party projects. The following are attribution notices from dependencies: ---------- Undertow ---------- JBoss, Home of Professional Open Source. Copyright 2014 Red Hat, Inc., and individual contributors as indicated by the @author tags. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Jackson ---------- This copy of Jackson JSON processor streaming parser/generator is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		http://www.apache.org/licenses/LICENSE-2.0 ---------- SLF4J ---------- Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G https://www.slf4j.org/license.html ---------- Commons-lang3 ---------- Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to You under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Logback ---------- Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2015, QOS.ch. All rights reserved. This program and the accompanying materials

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. ====================== End of Notice file ========================= ===================== Licence ===================== APACHE 2.0 - See Appendix E ========== === 4th party Jackson ====================copyright ============== Copyright (c) 2008-2013;2019 FasterXML, All rights reserved ========== ========== ============== NOTICE ====================== # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 2.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS(-2.x) file, which is included

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ========== ========== 4th party commons-lang ========== NOTICE.txt ========== Apache Commons Lang Copyright 2001-2021 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). ========== ========== 4th party slf4J [MIT Licence - http://www.slf4j.org/license.html] ==========Begin license text.========== Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G ==========End license text.==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Network New Technologies Inc.	json-schema-validator 1.0.43	Json-schema-validator Copyright (c) 2019 Network New Technologies Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Third Party Dependencies ---------- This project includes or depends on code from third party projects. The following are attribution notices from dependencies: ---------- Undertow ---------- JBoss, Home of Professional Open Source. Copyright 2014 Red Hat, Inc., and individual contributors as indicated by the @author tags. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Jackson ---------- This copy of Jackson JSON processor streaming parser/generator is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 ---------- SLF4J

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G https://www.slf4j.org/license.html ---------- Commons-lang3 ---------- Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to You under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Logback ---------- Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2015, QOS.ch. All rights reserved. This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation.
JSR305 expert group	jsr305 3.0.2	Copyright (c) JSR305 expert group All rights reserved. See Appendix M Other copyright notices in this distribution (NOTE: software below RELICENSED to Oracle under BSD 3-clause) Copyright (c) 2005, Brian Goetz and Tim Peierls See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Vitaly Puzrin	js-yaml 4.1.0	------------------------------ Top-level license -------------------------- (The MIT License) Copyright (C) 2011-2015 by Vitaly Puzrin MIT License See Appendix G ------------------------------ Copyright notices -------------------------- (The MIT License) Copyright (C) 2011-2015 by Vitaly Puzrin MIT License See Appendix G ---------------------------- Fourth-party information ---------------------- == NAME OF DEPENDENCY 1 argparse == License Python-2.0 A. HISTORY OF THE SOFTWARE Python was created in the early 1990s by Guido van Rossum at Stichting Mathematisch Centrum (CWI, see http://www.cwi.nl) in the Netherlands as a successor of a language called ABC. Guido remains Python's principal author, although it includes many contributions from others. In 1995, Guido continued his work on Python at the Corporation for National Research Initiatives (CNRI, see http://www.cnri.reston.va.us) in Reston, Virginia where he released several versions of the software. In May 2000, Guido and the Python core development team moved to BeOpen.com to form the BeOpen PythonLabs team. In October of the same year, the PythonLabs team moved to Digital Creations, which became Zope Corporation. In 2001, the Python Software Foundation (PSF, see https://www.python.org/psf/) was formed, a non-

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		profit organization created specifically to own Python-related Intellectual Property. Zope Corporation was a sponsoring member of the PSF. All Python releases are Open Source (see http://www.opensource.org for the Open Source Definition). Historically, most, but not all, Python releases have also been GPL-compatible; the table below summarizes the various releases. Release Derived Year Owner GPL- from compatible? (1) 0.9.0 thru 1.2 1991-1995 CWI yes 1.3 thru 1.5.2 1.2 1995-1999 CNRI yes 1.6 1.5.2 2000 CNRI no 2.0 1.6 2000 BeOpen.com no 1.6.1 1.6 2001 CNRI yes (2) 2.1 2.0+1.6.1 2001 PSF no 2.0.1 2.0+1.6.1 2001 PSF yes 2.1.1 2.1+2.0.1 2001 PSF yes 2.1.2 2.1.1 2002 PSF yes 2.1.3 2.1.2 2002 PSF yes 2.2 and above 2.1.1 2001-now PSF yes Footnotes: (1) GPL-compatible doesn't mean that we're distributing Python under the GPL. All Python licenses, unlike the GPL, let you distribute a modified version without making your changes open source. The GPL-compatible licenses make it possible to combine Python with other software that is released under the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		GPL; the others don't. (2) According to Richard Stallman, 1.6.1 is not GPL-compatible, because its license has a choice of law clause. According to CNRI, however, Stallman's lawyer has told CNRI's lawyer that 1.6.1 is "not incompatible" with the GPL. Thanks to the many outside volunteers who have worked under Guido's direction to make these releases possible. B. TERMS AND CONDITIONS FOR ACCESSING OR OTHERWISE USING PYTHON PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2 --- 1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software ("Python") in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee. 3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		work a brief summary of the changes made to Python. 4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement. BEOPEN.COM LICENSE AGREEMENT FOR PYTHON 2.0 ---------- BEOPEN PYTHON OPEN SOURCE LICENSE AGREEMENT VERSION 1 1. This LICENSE AGREEMENT is between BeOpen.com ("BeOpen"), having an

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		office at 160 Saratoga Avenue, Santa Clara, CA 95051, and the Individual or Organization ("Licensee") accessing and otherwise using this software in source or binary form and its associated documentation ("the Software"). 2. Subject to the terms and conditions of this BeOpen Python License Agreement, BeOpen hereby grants Licensee a non-exclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use the Software alone or in any derivative version, provided, however, that the BeOpen Python License is retained in the Software, alone or in any derivative version prepared by Licensee. 3. BeOpen is making the Software available to Licensee on an "AS IS" basis. BEOPEN MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, BEOPEN MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF THE SOFTWARE WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 4. BEOPEN SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF THE SOFTWARE FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF USING, MODIFYING OR DISTRIBUTING THE SOFTWARE, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 5. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 6. This License Agreement shall be governed by and interpreted in all respects by the law of the State of California, excluding conflict of law provisions. Nothing in this License Agreement shall be deemed to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		create any relationship of agency, partnership, or joint venture between BeOpen and Licensee. This License Agreement does not grant permission to use BeOpen trademarks or trade names in a trademark sense to endorse or promote products or services of Licensee, or any third party. As an exception, the "BeOpen Python" logos available at http://www.pythonlabs.com/logos.html may be used according to the permissions granted on that web page. 7. By copying, installing or otherwise using the software, Licensee agrees to be bound by the terms and conditions of this License Agreement. CNRI LICENSE AGREEMENT FOR PYTHON 1.6.1 --------------------------------------- 1. This LICENSE AGREEMENT is between the Corporation for National Research Initiatives, having an office at 1895 Preston White Drive, Reston, VA 20191 ("CNRI"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 1.6.1 software in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, CNRI hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 1.6.1 alone or in any derivative version, provided, however, that CNRI's License Agreement and CNRI's notice of copyright, i.e., "Copyright (c) 1995-2001 Corporation for National Research Initiatives; All Rights Reserved" are retained in Python 1.6.1 alone or in any derivative version prepared by Licensee. Alternately, in lieu of CNRI's License Agreement, Licensee may substitute the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		following text (omitting the quotes): "Python 1.6.1 is made available subject to the terms and conditions in CNRI's License Agreement. This Agreement together with Python 1.6.1 may be located on the Internet using the following unique, persistent identifier (known as a handle): 1895.22/1013. This Agreement may also be obtained from a proxy server on the Internet using the following URL: http://hdl.handle.net/1895.22/1013". 3. In the event Licensee prepares a derivative work that is based on or incorporates Python 1.6.1 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 1.6.1. 4. CNRI is making Python 1.6.1 available to Licensee on an "AS IS" basis. CNRI MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, CNRI MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 1.6.1 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. CNRI SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 1.6.1 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 1.6.1, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 7. This License Agreement shall be governed by the federal intellectual property law of the United States, including without limitation the federal copyright law, and, to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		the extent such U.S. federal law does not apply, by the law of the Commonwealth of Virginia, excluding Virginia's conflict of law provisions. Notwithstanding the foregoing, with regard to derivative works based on Python 1.6.1 that incorporate non-separable material that was previously distributed under the GNU General Public License (GPL), the law of the Commonwealth of Virginia shall govern this License Agreement only as to issues arising under or with respect to Paragraphs 4, 5, and 7 of this License Agreement. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between CNRI and Licensee. This License Agreement does not grant permission to use CNRI trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By clicking on the "ACCEPT" button where indicated, or by copying, installing or otherwise using Python 1.6.1, Licensee agrees to be bound by the terms and conditions of this License Agreement. ACCEPT CWI LICENSE AGREEMENT FOR PYTHON 0.9.0 THROUGH 1.2 == Copyright Notices ---------- --- Copyright (c) 1991 - 1995, Stichting Mathematisch Centrum Amsterdam, The Netherlands. All rights reserved. Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		both that copyright notice and this permission notice appear in supporting documentation, and that the name of Stichting Mathematisch Centrum or CWI not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. STICHTING MATHEMATISCH CENTRUM DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS, IN NO EVENT SHALL STICHTING MATHEMATISCH CENTRUM BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ---------- (separator) ----------
Vitaly Puzrin	js-yaml 3.14.0	Copyright (C) 2011-2015 by Vitaly Puzrin ---------separator--------- See Appendix G ---------separator--------- sprintf-js@1.0.3 (BSD-3-Clause) Copyright (c) 2007-2014, Alexandru Marasteanu All rights reserved. See Appendix M ---------separator--------- argparse@1.0.10 (MIT) Copyright (C) 2012 by Vitaly Puzrin See Appendix G ---------separator--------- esprima@4.0.1 (BSD-2-Clause) Copyright JS Foundation and other contributors, https://js.foundation/ See Appendix M ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
	JUnit 5.7.1	
JWCrypto Contributors	jwcrypto 1.0 jwcrypto 1.4.2	jwcrypto Release 1.0 COPYRIGHT: 2016-2018, JWCrypto Contributors LICENSE: GNU LESSER GENERAL PUBLIC LICENSE Version 3, 29 June 2007 See Appendix C

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
David Arthur	kafka-python 2.0.2	---------- TOP LEVEL COPYRIGHT NOTICE License Apache License, v2.0. See LICENSE. Copyright 2016, Dana Powers, David Arthur, and Contributors ---------- TOP LEVEL LICENSE TEXT Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ See Appendix E END OF TERMS AND CONDITIONS APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright 2015 David Arthur Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See the License for the specific language governing permissions and limitations under the License.
fabric8io	Kubernetes & OpenShift Java Client 5.6.0 Kubernetes & OpenShift Java Client 5.12.2	Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Red Hat, Inc.	Keycloak 10.0.2	Copyright 2016 Red Hat, Inc. and/or its affiliates and other contributors as indicated by the @author tags. Licensed under the Apache License, version 2.0. ---------separator--------- org.bouncycastle:bcprov-jdk15on:jar:1.65 org.bouncycastle:bcpkix-jdk15on:jar:1.65 Copyright (c) 2000 - 2020 The Legion of the Bouncy Castle Inc. (https://www.bouncycastle.org) See Appendix G ---------separator--------- Fourth Party Dependencies Licensed under only Apache License, Version 2.0 com.openshift:openshift-restclient-java:jar:8.0.0.Final Copyright (c) 2011 Red Hat, Inc. -- com.squareup.okhttp3:okhttp:jar:3.14.2 com.squareup.okio:okio:jar:1.17.2 Copyright 2019 Square, Inc. -- com.webauthn4j:webauthn4j-core:jar:0.10.2.RELEASE com.webauthn4j:webauthn4j-util:jar:0.10.2.RELEASE Copyright 2018 the original author or authors. -- io.reactivex.rxjava2:rxjava:jar:2.2.4 Copyright (c) 2016-present, RxJava Contributors. -- io.netty:netty-handler:jar:4.1.45.Final io.netty:netty-buffer:jar:4.1.45.Final io.netty:netty-transport:jar:4.1.45.Final io.netty:netty-resolver:jar:4.1.45.Final io.netty:netty-codec:jar:4.1.45.Final io.netty:netty-common:jar:4.1.45.Final io.netty:netty-transport-native-unix-common:jar:4.1.45.Final Copyright 2012 The Netty Project -- org.codehaus.plexus:plexus-component-annotations:jar:1.7.1 org.codehaus.plexus:plexus-utils:jar:3.1.0 org.codehaus.groovy:groovy-all:jar:2.4.12 Copyright (c) 2009 codehaus.org. -- org.codehaus.plexus:plexus-classworlds:jar:2.5.2 Copyright 2002 (C) The Codehaus. All Rights Reserved. --

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.codehaus.plexus:plexus-interpolation:jar:1.24 Copyright 2001-2008 Codehaus Foundation. -- com.github.stephenc.jcip:jcip-annotations:jar:1.0-1 Copyright 2013 Stephen Connolly. -- org.aesh:aesh:jar:2.4 org.aesh:readline:jar:2.0 Copyright 2014 Red Hat Inc. and/or its affiliates and other contributors -- org.fusesource.jansi:jansi:jar:1.18 Copyright (C) 2009-2017 the original author(s). -- xerces:xercesImpl:jar:2.12.0.SP02 Copyright © 1999-2020 The Apache Software Foundation. All Rights Reserved. -- com.fasterxml.jackson.core:jackson-core:jar:2.10.1 com.fasterxml.jackson.core:jackson-databind:jar:2.10.1 com.fasterxml.jackson.core:jackson-annotations:jar:2.10.1 com.fasterxml.jackson.dataformat:jackson-dataformat-cbor:jar:2.10.1 com.fasterxml:classmate:jar:1.3.4 org.infinispan:infinispan-core:jar:9.4.18.Final org.infinispan:infinispan-commons:jar:9.4.18.Final org.infinispan:infinispan-multimap:jar:9.4.18.Final org.infinispan:infinispan-cachestore-remote:jar:9.4.18.Final org.infinispan:infinispan-client-hotrod:jar:9.4.18.Final Copyright 2016 Red Hat, Inc. and/or its affiliates -- org.jboss.resteasy:resteasy-jaxrs:jar:3.11.2.Final Copyright 2019 Red Hat, Inc. and/or its affiliates -- org.apache.kerby:kerby-asn1:jar:2.0.0 org.apache.commons:commons-collections4:jar:4.1 org.apache.james:apache-mime4j:jar:0.6 org.apache.santuario:xmlsec:jar:2.1.4 org.apache.maven:maven-aether-provider:jar:3.3.9 org.apache.maven:maven-artifact:jar:3.5.4 org.apache.maven.plugin-tools:maven-plugin-annotations:jar:3.4 org.apache.maven:maven-core:jar:3.3.9

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.apache.maven:maven-model:jar:3.5.4 org.apache.maven:maven-model-builder:jar:3.5.4 org.apache.maven:maven-plugin-api:jar:3.3.9 org.apache.maven:maven-repository-metadata:jar:3.5.4 org.apache.maven:maven-settings:jar:3.3.9 org.apache.maven:maven-settings-builder:jar:3.3.9 org.apache.maven:maven-builder-support:jar:3.5.4 org.apache.commons:commons-lang3:jar:3.9 org.apache.commons:commons-compress:jar:1.18 org.apache.httpcomponents:httpclient:jar:4.5.11 org.apache.httpcomponents:httpcore:jar:4.4.13 org.freemarker:freemarker:jar:2.3.29 commons-lang:commons-lang:jar:2.6 commons-logging:commons-logging:jar:1.2 commons-codec:commons-codec:jar:1.6 commons-io:commons-io:jar:2.6 <!-- ========== Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to you under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== This software consists of voluntary contributions made by many individuals on behalf of the Apache Software Foundation. For more information on the Apache Software Foundation, please see <http://www.apache.org />. --> -- com.google.guava:guava:jar:25.0-jre com.google.code.findbugs:jsr305:jar:1.3.9 com.google.errorprone:error_prone_annotations:jar:2.1.3

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		com.google.j2objc:j2objc-annotations:jar:1.1 com.google.code.gson:gson:jar:2.8.2 <!-- Copyright 2011 Google Inc. All Rights Reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --> -- com.google.zxing:javase:jar:3.4.0 com.google.zxing:core:jar:3.4.0 <!-- Copyright (C) 2010 ZXing authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --> -- com.github.ua-parser:uap-java:jar:1.4.3 Copyright 2012 Twitter, Inc -- org.yaml:snakeyaml:jar:1.20 Copyright (c) 2008, http://www.snakeyaml.org -- org.twitter4j:twitter4j-core:jar:4.0.7 Copyright 2007 Yusuke Yamamoto -- com.googlecode.javaewah:JavaEWAH:jar:1.1.6 com.googlecode.owasp-java-html-sanitizer:owasp-java-html-sanitizer:jar:20191001.1

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(c) 2009-2016 Daniel Lemire (http://lemire.me/en/), Cliff Moon, David McIntosh (https://github.com/mctofu), Robert Becho (https://github.com/RBecho), Colby Ranger (https://github.com/crangeratgoogle), Veronika Zenz (https://github.com/veronikazenz), Owen Kaser (https://github.com/owenkaser), Gregory Ssi-Yan-Kai (https://github.com/gssiyankai), and Rory Graves (https://github.com/rorygraves) This code is licensed under Apache License, Version 2.0 (ASL2.0). (GPL 2.0 derivatives are allowed.) -- org.jboss.logging:jboss-logging:jar:3.4.1.Final net.bytebuddy:byte-buddy:jar:1.9.11 com.github.ben-manes.caffeine:caffeine:jar:2.6.2 com.github.jai-imageio:jai-imageio-core:jar:1.4.0 Apache License, Version 2.0 -- org.jboss.logmanager:jboss-logmanager:jar:2.1.14.Final org.jboss.marshalling:jboss-marshalling:jar:2.0.9.Final org.jboss.marshalling:jboss-marshalling-osgi:jar:2.0.6.Final Copyright 2014 Red Hat, Inc. and/or its affiliates. -- org.jboss.remoting:jboss-remoting:jar:5.0.17.Final org.jboss.aesh:aesh:jar:0.66.19 org.jboss.resteasy:resteasy-client:jar:3.11.2.Final org.jboss.resteasy:resteasy-jaxb-provider:jar:3.11.2.Final org.jboss.resteasy:resteasy-multipart-provider:jar:3.11.2.Final org.jboss.modules:jboss-modules:jar:1.10.0.Final org.jboss.logging:jboss-logging-processor:jar:2.2.1.Final org.jboss.logging:jboss-logging-annotations:jar:2.2.1.Final org.jboss.jdeparser:jdeparser:jar:2.0.3.Final org.jboss.classfilewriter:jboss-classfilewriter:jar:1.2.4.Final org.jboss.invocation:jboss-invocation:jar:1.5.2.Final org.jboss.marshalling:jboss-marshalling-river:jar:2.0.0.Final Copyright 2016, Red Hat, Inc., and individual contributors as indicated by the @author tags. ---------separator--------- org.codehaus.mojo:animal-sniffer-annotations:jar:1.14 org.codehaus.woodstox:stax2-api:jar:4.2 Copyright (c) 2009 codehaus.org. See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------separator--------- Fourth Party Dependencies Licensed only The BSD License antlr:antlr:jar:2.7.7 ANTLR 4 License [The BSD License] Copyright (c) 2012 Terence Parr and Sam Harwell All rights reserved. See Appendix M ---------separator--------- Fourth Party Dependencies Licensed under the GNU Lesser General Public License v2.1 or later --> org.jboss.msc:jboss-msc:jar:1.4.11.Final Copyright 2010, Red Hat, Inc., and individual contributors as indicated by the @author tags -- org.jboss.metadata:jboss-metadata-common:jar:13.0.0.Final org.jboss.metadata:jboss-metadata-web:jar:13.0.0.Final org.jboss.metadata:jboss-metadata-ear:jar:13.0.0.Final <!-- ~ JBoss, Home of Professional Open Source. ~ Copyright 2016, Red Hat, Inc., and individual contributors ~ as indicated by the @author tags. See the copyright.txt file in the ~ distribution for a full listing of individual contributors. ~ ~ This is free software; you can redistribute it and/or modify it ~ under the terms of the GNU Lesser General Public License as ~ published by the Free Software Foundation; either version 2.1 of ~ the License, or (at your option) any later version. ~ ~ This software is distributed in the hope that it will be useful, ~ but WITHOUT ANY WARRANTY; without even the implied warranty of ~ MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU ~ Lesser General Public License for more details. ~

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		~ You should have received a copy of the GNU Lesser General Public ~ License along with this software; if not, write to the Free ~ Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA ~ 02110-1301 USA, or see the FSF site: http://www.fsf.org. --> -- org.hibernate:hibernate-core:jar:5.3.15.Final org.hibernate.common:hibernate-commons-annotations:jar:5.0.4.Final Copyright 2016 Red Hat, Inc. and/or its affiliates org.picketbox:picketbox:jar:5.0.3.Final © Copyright 2013 Red Hat, Inc. ---------separator-------- com.jcraft:jsch:jar:0.1.55 com.jcraft:jzlib:jar:1.1.3 JSch 0.0.* was released under the GNU LGPL license. Later, we have switched over to a BSD-style license. Copyright (c) 2002-2015 Atsuhiko Yamanaka, JCraft,Inc. All rights reserved. See Appendix M ---------separator------- Fourth Party Dependencies Licensed under EPL 1.0 1. The following files are available in source code form under the Eclipse Public License at: http://www.oracle.com/technetwork/opensource/opensource-code-1366576.html. (The EPL license is reproduced below). 2. All past Contributors to these files disclaim all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose. In addition, such Contributors are not liable for any damages, including direct, indirect, special, incidental and consequential damages, such as lost profits. 3. Any provisions of the Oracle license agreement that differ from the Eclipse Public License are offered by Oracle alone and not by any other party. 4. These files are licensed in executable form under your Oracle license agreement. Oracle is solely responsible for any representations and warranties contained therein. com.h2database:h2:jar:1.4.197 aether-api 1.0.2.v20150114

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		aether-impl 1.0.2.v20150114 aether-spi 1.0.2.v20150114 aether-util 1.0.2.v20150114 org.eclipse.jgit 5.0.2.201807311906-r org.eclipse.sisu.inject 0.3.2 org.eclipse.sisu.plexus 0.3.2 ---------separator--------- Fourth Party Dependencies Licensed under MPL 1.1, LGPL 2.1 or Apache License 2.0 org.javassist:javassist:jar:3.23.2-GA Oracle elects the Apache License Version 2.0. ---------separator--------- org.dom4j:dom4j:jar:2.1.3 Copyright 2001-2016 (C) MetaStuff, Ltd. and DOM4J contributors. All Rights Reserved. Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain copyright statements and notices. Redistributions must also contain a copy of this document. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. 3. The name "DOM4J" must not be used to endorse or promote products derived from this Software without prior written permission of MetaStuff, Ltd. For written permission, please contact dom4j-info@metastuff.com. 4. Products derived from this Software may not be called "DOM4J" nor may "DOM4J" appear in their names without prior written permission of MetaStuff, Ltd. DOM4J is a registered trademark of MetaStuff, Ltd. 5. Due credit should be given to the DOM4J Project - https://dom4j.github.io/ THIS SOFTWARE IS PROVIDED BY METASTUFF, LTD. AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL METASTUFF, LTD. OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ---------separator--------- org.checkerframework:checker-compat-qual:jar:2.0.0 Checker Framework qualifiers Copyright 2004-present by the Checker Framework developers See Appendix G ---------separator--------- APACHE 2.0 - See Appendix E -- GNU General Public License, Version 2 (GPL-2.1) - See Appendix B -- EPL Version 1.0 - See Appendix J
Kong Inc.	Kong 1.0.3	Copyright 2016-2018 Kong Inc. Licensed under the Apache License, Version 2.0 (the "License") APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
JSON-SMART authors	json-smart 2.4.8	Copyright Info: ---------- Copyright 2011 JSON-SMART authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. License Info ---------- Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ APACHE 2.0 - See Appendix E APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright [yyyy] [name of copyright owner] Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Dependency 1: accessors-smart Copyright 2011 JSON-SMART authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Dependency 2: ASM ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Kubernetes Authors	Kubernetes Java Client 15.0.1 Kubernetes Java Client 16.0.0	Licenses Top-level license and Copyright APACHE 2.0 - See Appendix E ********** org.yaml:snakeyaml APACHE 2.0 - See Appendix E Apache License, Version 1.1

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Kubernetes Authors	Kubernetes Python Client 21.7.0 Kubernetes Python Client 23.3.0 Kubernetes Python Client 24.2.0	Copyright 2014 The Kubernetes Authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- APACHE 2.0 - See Appendix E ----------4th-party dependencies---------- certifi This package contains a modified version of ca-bundle.crt: ca-bundle.crt -- Bundle of CA Root Certificates Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011# This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree: http://mxr.mozilla.org/mozilla/source/security/nss/lib/ckfw/builtins/certdata.txt?raw=1# It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php_curl, or with an Apache+mod_ssl webserver for SSL client authentication.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Just configure this file as the SSLCACertificateFile.# ***** BEGIN LICENSE BLOCK ***** This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at http://mozilla.org/MPL/2.0/. ********** Mozilla Public License Version 2.0 - See Appendix S ---------- six Copyright (c) 2010-2020 Benjamin Peterson See Appendix G ---------- python-dateutil Copyright 2017- Paul Ganssle Copyright 2017- dateutil contributors (see AUTHORS file) Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The above license applies to all contributions after 2017-12-01, as well as all contributions that have been re-licensed (see AUTHORS file for the list of contributors who have re-licensed their code). --- dateutil - Extensions to the standard Python datetime module. Copyright 2017- Paul Ganssle Copyright 2017- dateutil contributors (see AUTHORS file) Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. The above license applies to all contributions after 2017-12-01, as well as all contributions that have been re-licensed (see AUTHORS file for the list of contributors who have re-licensed their code). --- dateutil - Extensions to the standard Python datetime module. Copyright (c) 2003-2011 - Gustavo Niemeyer Copyright (c) 2012-2014 - Tomi Pieviläinen Copyright (c) 2014-2016 - Yaron de Leeuw Copyright (c) 2015- - Paul Ganssle Copyright (c) 2015- - dateutil contributors (see AUTHORS file) All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The above BSD License Applies to all code, even that also covered by Apache 2.0. --- setuptools Copyright (C) 2016 Jason R Coombs MIT License See Appendix G --- PyYAML Copyright (c) 2017-2021 Ingy döt Net Copyright (c) 2006-2016 Kirill Simonov MIT License See Appendix G --- google-auth Copyright 2019 Google LLC Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- websocket-client LGPL v2.1 - See Appendix T ---------- requests Copyright 2019 Kenneth Reitz Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- requests-oauthlib 1.3.0 ISC License Copyright (c) 2014 Kenneth Reitz. Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ---------- ---------- urllib3 1.26.7 MIT License Copyright (c) 2008-2020 Andrey Petrov and contributors (see CONTRIBUTORS.txt) MIT License See Appendix G _____ cachetools 4.2.4 The MIT License (MIT) Copyright (c) 2014-2021 Thomas Kemmer MIT License See Appendix G _____ pyasn1-modules 0.2.8 Copyright (c) 2005-2019, Ilya Etingof All rights reserved. See Appendix M _____ rsa 4.7.2 Copyright 2011 Sybren A. Stüvel

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ***** Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ _____ idna 3.2 MIT License Copyright (c) 2019 TAHRI Ahmed R. MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Kubernetes Authors	Kubernetes Python Client 11.0.0	# Copyright 2016 The Kubernetes Authors. # # Licensed under the Apache License, Version 2.0 (the "License"); # you may not use this file except in compliance with the License. # You may obtain a copy of the License at # # http://www.apache.org/licenses/LICENSE-2.0 # # Unless required by applicable law or agreed to in writing, software # distributed under the License is distributed on an "AS IS" BASIS, # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. # See the License for the specific language governing permissions and # limitations under the License. APACHE 2.0 - See Appendix E ############4th party dependencies########## certifi, 2020.4.5.2, MPL This packge contains a modified version of ca-bundle.crt: ca-bundle.crt -- Bundle of CA Root Certificates Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011 # This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree: http://mxr.mozilla.org/mozilla/source/security/nss/lib/ckfw/builtins/certdata.txt?raw=1# It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php_curl, or with an Apache+mod_ssl webserver for SSL client authentication. Just configure this file as the SSLCACertificateFile. # ***** BEGIN LICENSE BLOCK ***** This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at http://mozilla.org/MPL/2.0/. ***** END LICENSE BLOCK ***** @(#) $RCSfile: certdata.txt,v $ $Revision: 1.80 $ $Date: 2011/11/03 15:11:58 $ Mozilla Public License Version 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== Mozilla Public License Version 2.0 - See Appendix S ++++++++++ six, 1.15.0 MIT Copyright (c) 2010-2020 Benjamin Peterson MIT License See Appendix G ++++++++++ python-dateutil, 2.8.1, Apache 2.0 + BSD Copyright 2017- Paul Ganssle <paul@ganssle.io> Copyright 2017- dateutil contributors (see AUTHORS file) Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. The above license applies to all contributions after 2017-12-01, as well as all contributions that have been re-licensed (see AUTHORS file for the list of contributors who have re-licensed their code). ---------- dateutil - Extensions to the standard Python datetime module. Copyright (c) 2003-2011 - Gustavo Niemeyer <gustavo@niemeyer.net> Copyright (c) 2012-2014 - Tomi Pieviläinen <tomi.pievilainen@iki.fi> Copyright (c) 2014-2016 - Yaron de Leeuw <me@jarondl.net> Copyright (c) 2015- - Paul Ganssle <paul@ganssle.io> Copyright (c) 2015- - dateutil contributors (see AUTHORS file) All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The above BSD License Applies to all code, even that also covered by Apache 2.0. ++++++++++++++++ setuptools, 47.1.1, MIT Copyright (C) 2016 Jason R Coombs <jaraco@jaraco.com> MIT License See Appendix G ++++++++++++++++++++++++ pyyaml, 5.3.1, MIT Copyright (c) 2017-2020 Ingy döt Net Copyright (c) 2006-2016 Kirill Simonov MIT License See Appendix G ++++++++++++++++++ google-auth, 1.17.1, Apache-2.0 # Copyright 2019 Google LLC # # Licensed under the Apache License, Version 2.0 (the "License"); # you may not use this file except in compliance with the License. # You may obtain a copy of the License at # # http://www.apache.org/licenses/LICENSE-2.0 # # Unless required by applicable law or agreed to in writing, software # distributed under the License is distributed on an "AS IS" BASIS, # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. # See the License for the specific language governing permissions and # limitations under the License. ++++++++++++++++++++++++ ipaddress, 1.0.23, PSF This package is a modified version of cpython's ipaddress module. It is therefore distributed under the PSF license, as follows: PYTHON SOFTWARE FOUNDATION LICENSE VERSION 2 -- 1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using this software

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		("Python") in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright (c) 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014 Python Software Foundation; All Rights Reserved" are retained in Python alone or in any derivative version prepared by Licensee. 3. In the event Licensee prepares a derivative work that is based on or incorporates Python or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python. 4. PSF is making Python available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 7. Nothing in this License Agreement shall be deemed to create any relationship of

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By copying, installing or otherwise using Python, Licensee agrees to be bound by the terms and conditions of this License Agreement. ++++++++++++++++++++++++ websocket-client, 0.57.0, BSD Copyright 2018 Hiroki Ohtani. See Appendix M ++++++++++++++++++ requests, 2.23.0, Apache-2.0 Copyright 2019 Kenneth Reitz Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ++++++++++++++++++++ requests-oauthlib , v1.3.0, ISC ISC License Copyright (c) 2014 Kenneth Reitz. Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ++++++++++++++++++++ urllib3, 1.25.9, MIT MIT License Copyright (c) 2008-2020 Andrey Petrov and contributors (see CONTRIBUTORS.txt) MIT License See Appendix G
Red Hat, Inc.,	Kubespray 2.15.0	APACHE 2.0 - See Appendix E Copyright 2016 Kubespray Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
TobiX	Lockable resources plug-in 2.11 Lockable resources plug-in 2.18	Lockable resources plugin, 2.11 The MIT License Copyright 2013-2015, 6WIND S.A. All rights reserved. Copyright 2016-2018, Antonio Muñiz Copyright 2019, TobiX MIT License See Appendix G APACHE 2.0 - See Appendix E ---------- workflow-support-plugin,3.8 (Pipeline: Supporting APIs) The MIT License ~ ~ Copyright (c) 2013-2014, CloudBees, Inc. ~ ~ MIT License See Appendix G ---------- mailer-plugin,1.34 (Mailer Plugin) The MIT License Copyright (c) 2006, 2008 Junio C Hamano Copyright (c) 2004-2018, Sun Microsystems, Inc., CloudBees, Inc. Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi, Luca Domenico Milanesio Copyright (c) 2004-2010, Sun Microsystems, Inc., Kohsuke Kawaguchi Copyright (c) 2013-2014, CloudBees, Inc. Copyright (c) 2012-2013 Kohsuke Kawaguchi Copyright (C) 2018 - 2020 Oleg Nenashev, Alessandro Menti Begin license text. Copyright

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		MIT License See Appendix G End license text. --- --- matrix-project-plugin,1.19 (Matrix Project Plugin) The MIT License Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi Copyright 2014 Jesse Glick. Copyright (c) 2015 Red Hat, Inc. Copyright (c) 2010-2011, Alan Harder Copyright 2016 EvilTK. Copyright (c) 2004-2011, Sun Microsystems, Inc., CloudBees, Inc. Copyright (c) 2004-2010, Sun Microsystems, Inc. Kohsuke Kawaguchi. Knud Poulsen Copyright 2012 sogabe Copyright (c) 2013, Chunghwa Telecom Co., Ltd., Pei-Tang Huang Copyright (c) 2006, 2008 Junio C Hamano Copyright (c) 2010, InfraDNA, Inc. Begin license text. Copyright MIT License See Appendix G End license text. --- --- script-security-plugin,1.78 (Script Security Plugin) The MIT License Copyright 2014 Jesse Glick, CloudBees Inc. Copyright 2014 Jesse Glick. Copyright 2019 CloudBees, Inc. Copyright 2016 CloudBees, Inc. Begin license text.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright MIT License See Appendix G End license text. --- --- structs-plugin,1.23 (Structs Plugin) The MIT License Copyright 2019 CloudBees, Inc. Copyright (c) 2017, CloudBees, Inc. Copyright (c) 2018, CloudBees, Inc. Copyright 2014 Jesse Glick. Begin license text. Copyright MIT License See Appendix G End license text. Lockable resources plugin, 2.11 The MIT License Copyright 2013-2015, 6WIND S.A. All rights reserved. Copyright 2016-2018, Antonio Muñiz Copyright 2019, TobiX MIT License See Appendix G --- --- caffeine-api-plugin,2.9.2-29.v717aac953ff3(Caffeine API Plugin) Apache License Copyright (c) 2006, 2008 Junio C Hamano Apache License Version 2.0, January 2004

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		http://www.apache.org/ licenses/ APACHE 2.0 - See Appendix E --- workflow-support-plugin,3.8 (Pipeline: Supporting APIs) The MIT License ~ ~ Copyright (c) 2013-2014, CloudBees, Inc. ~ ~ MIT License See Appendix G --- mailer-plugin,1.34 (Mailer Plugin) The MIT License Copyright (c) 2006, 2008 Junio C Hamano Copyright (c) 2004-2018, Sun Microsystems, Inc., CloudBees, Inc. Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi, Luca Domenico Milanesio Copyright (c) 2004-2010, Sun Microsystems, Inc., Kohsuke Kawaguchi Copyright (c) 2013-2014, CloudBees, Inc. Copyright (c) 2012-2013 Kohsuke Kawaguchi Copyright (C) 2018 - 2020 Oleg Nenashev, Alessandro Menti Begin license text. Copyright MIT License See Appendix G End license text.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- matrix-project-plugin,1.19 (Matrix Project Plugin) The MIT License Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi Copyright 2014 Jesse Glick. Copyright (c) 2015 Red Hat, Inc. Copyright (c) 2010-2011, Alan Harder Copyright 2016 EvilTK. Copyright (c) 2004-2011, Sun Microsystems, Inc., CloudBees, Inc. Copyright (c) 2004-2010, Sun Microsystems, Inc. Kohsuke Kawaguchi. Knud Poulsen Copyright 2012 sogabe Copyright (c) 2013, Chunghwa Telecom Co., Ltd., Pei-Tang Huang Copyright (c) 2006, 2008 Junio C Hamano Copyright (c) 2010, InfraDNA, Inc. Begin license text. Copyright MIT License See Appendix G End license text. ---------- script-security-plugin,1.78 (Script Security Plugin) The MIT License Copyright 2014 Jesse Glick, CloudBees Inc. Copyright 2014 Jesse Glick. Copyright 2019 CloudBees, Inc. Copyright 2016 CloudBees, Inc. Begin license text. Copyright MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		End license text. --- --- structs-plugin,1.23 (Structs Plugin) The MIT License Copyright 2019 CloudBees, Inc. Copyright (c) 2017, CloudBees, Inc. Copyright (c) 2018, CloudBees, Inc. Copyright 2014 Jesse Glick. Begin license text. Copyright MIT License See Appendix G End license text. --- ---
CloudBees, Inc.	Login Theme Plugin for Jenkins 1.1	MIT License Copyright (c) 2018, CloudBees, Inc. MIT License See Appendix G ----------structs:-1.2———————————— The MIT License (MIT) Copyright 2014 Jesse Glick. Copyright (c) 2017, CloudBees, Inc. Copyright (c) 2018, CloudBees, Inc. Copyright 2019 CloudBees, Inc. MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
OpenJS Foundation	lodash 4.17.21	The MIT License Copyright OpenJS Foundation and other contributors Based on Underscore.js, copyright Jeremy Ashkenas, DocumentCloud and Investigative Reporters & Editors This software consists of voluntary contributions made by many individuals. For exact contribution history, see the revision history available at https://github.com/lodash/lodash The following license applies to all parts of this software except as documented below: ==== MIT License See Appendix G ==== Copyright and related rights for sample code are waived via CC0. Sample code is defined as all source code displayed within the prose of the documentation. CC0: http://creativecommons.org/publicdomain/zero/1.0/ ==== Files located in the node_modules and vendor directories are externally maintained libraries used by this software which have their own licenses; we recommend you read them, as their terms may differ from the terms above.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Apache	Log4J 2.13.1	These are all the Log4j 2.13.1 artifacts: log4j-1.2-api-2.13.1.jar log4j-api-2.13.1.jar log4j-api-scala_2.12-11.0.jar log4j-cassandra-2.13.1.jar log4j-core-2.13.1.jar log4j-couchdb-2.13.1.jar log4j-flume-ng-2.13.1.jar log4j-iostreams-2.13.1.jar log4j-jcl-2.13.1.jar log4j-jul-2.13.1.jar log4j-slf4j-impl-2.13.1.jar log4j-taglib-2.13.1.jar log4j-to-slf4j-2.13.1.jar log4j-web-2.13.1.jar They are all covered under the following license and copyright notice: License: Apache 2.0 See Appendix E Copyright Notice: Apache Log4j API Copyright 1999-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/).
The Apache Software Foundation	Log4J 2.13.3	Apache License See Appendix E --- Apache Log4j Copyright 1999-2017 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Apache Software Foundation	Log4J 2.14.1	Apache License See Appendix E --- Apache Log4j Copyright 1999-2017 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma 4th party compile dependencies: ========== Apache 2.0 license org.apache.logging.log4j:log4j-api:jar:2.14.1 org.apache.logging.log4j:log4j-core-java9:zip:2.14.1 org.osgi:org.osgi.core:jar:4.3.1 com.lmax:disruptor:jar:3.4.2 com.conversantmedia:disruptor:jar:1.2.15 org.jctools:jctools-core:jar:1.2.1 com.fasterxml.jackson.core:jackson-core:jar:2.12.2 com.fasterxml.jackson.core:jackson-databind:jar:2.12.2 com.fasterxml.jackson.core:jackson-annotations:jar:2.12.2 com.fasterxml.jackson.dataformat:jackson-dataformat-yaml:jar:2.12.2 org.yaml:snakeyaml:jar:1.27 com.fasterxml.jackson.dataformat:jackson-dataformat-xml:jar:2.12.2 com.fasterxml.jackson.module:jackson-module-jaxb-annotations:jar:2.12.2 Eclipse Distribution License - v 1.0 jakarta.xml.bind:jakarta.xml.bind-api:jar:2.3.2 jakarta.activation:jakarta.activation-api:jar:1.2.1 BSD License org.codehaus.woodstox:stax2-api:jar:4.2.1 Apache 2.0 License

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		com.fasterxml.woodstox:woodstox-core:jar:6.2.4 org.fusesource.jansi:jansi:jar:2.3.1 COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1 com.sun.mail:javax.mail:jar:1.6.2 javax.activation:activation:jar:1.1 COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1 & GNU GENERAL PUBLIC LICENSE 2.0 org.jboss.spec.javax.jms:jboss-jms-api_1.1_spec:jar:1.0.1.Final Apache 2.0 License org.apache.kafka:kafka-clients:jar:1.1.1 org.lz4:lz4-java:jar:1.4.1 org.xerial.snappy:snappy-java:jar:1.1.7.1 Mozilla Public License v2.0 org.zeromq:jeromq:jar:0.4.3 BSD-2-Clause org.zeromq:jnacl:jar:0.1.0 org.apache.commons:commons-compress:jar:1.21 org.apache.commons:commons-csv:jar:1.8 MIT License org.slf4j:slf4j-api:jar:1.7.25 ========== org.osgi » org.osgi.core: 4.3.1 (Apache 2.0) Copyright 2019 org.osgi Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the Li

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
QOS.ch	Logback 1.3.0-alpha5	3rd Party Component Name : Logback-Classic/Logback-Core 3rd Party Component Copyright: Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2015, QOS.ch. All rights reserved. This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation Oracle elects the Eclipse Public License v1.0 3rd Party Component License. Eclipse Public License - v 1.0 - See Appendix J SLF4J (MIT) Licensing terms for SLF4J SLF4J source code and binaries are distributed under the MIT license. Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G ========== Janino (BSD), optional Janino - An embedded Java[TM] compiler Copyright (c) 2001-2016, Arno Unkrig Copyright (c) 2015-2016 TIBCO Software Inc. All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Dmitry Andrianov	logstash-logback-encoder 6.4	logstash-logback-encoder v6.3 COPYRIGHT: (C) Dmitry Andrianov and individual contributors LICENSE: Apache 2.0 APACHE 2.0 - See Appendix E ========== 4P Dependencies: com.fasterxml.jackson.core » jackson-databind 2.9.6 (upgrade to 2.9.8) COPYRIGHT: It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. LICENSE: Apache 2.0 This copy of Jackson JSON processor databind module is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 ++++++++++4th party dependecies ++++ jackson-databind, v2.10.1, Apache 2.0 Copyright (c) 2019 Tatu Saloranta <tatu.saloranta@iki.fi> +++++++++++++++ logback-core, v1.2.3, * Logback: the reliable, generic, fast and flexible logging framework. * Copyright (C) 1999-2015, QOS.ch. All rights reserved. * * This program and the accompanying materials are dual-licensed under * either the terms of the Eclipse Public License v1.0 as published by * the Eclipse Foundation * * or (per the licensee's choosing) * * under the terms of the GNU Lesser General Public License version 2.1 * as published by the Free Software Foundation.
Project Lombok	Lombok 1.18.12	Copyright (C) 2009-2015 The Project Lombok Authors. MIT License See Appendix G
Project Lombok	Lombok 1.18.20	Copyright (C) 2009-2020 The Project Lombok Authors. MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Project Lombok	Lombok 1.18.22	========== COPYRIGHT NOTICE ========== Copyright (C) 2009-2021 The Project Lombok Authors. MIT License See Appendix G ========== Licenses for included components: org.ow2.asm:asm org.ow2.asm:asm-analysis org.ow2.asm:asm-commons org.ow2.asm:asm-tree org.ow2.asm:asm-util ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M --- rzwitserloot/com.zwitserloot.cmdreader Copyright Â© 2010 Reinier Zwitserloot. MIT License See Appendix G --- projectlombok/lombok.patcher Copyright (C) 2009-2021 The Project Lombok Authors. MIT License See Appendix G ---

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== COPYRIGHT NOTICE END ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Matplotlib Development Team	matplotlib 3.4.3	License agreement for matplotlib versions 1.3.0 and later ========== 1. This LICENSE AGREEMENT is between the Matplotlib Development Team ("MDT"), and the Individual or Organization ("Licensee") accessing and otherwise using matplotlib software in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, MDT hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use matplotlib alone or in any derivative version, provided, however, that MDT's License Agreement and MDT's notice of copyright, i.e., "Copyright (c) 2012- Matplotlib Development Team; All Rights Reserved" are retained in matplotlib alone or in any derivative version prepared by Licensee. 3. In the event Licensee prepares a derivative work that is based on or incorporates matplotlib or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to matplotlib . 4. MDT is making matplotlib available to Licensee on an "AS IS" basis. MDT MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, MDT MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF MATPLOTLIB WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. MDT SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF MATPLOTLIB FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		MATPLOTLIB , OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between MDT and Licensee. This License Agreement does not grant permission to use MDT trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By copying, installing or otherwise using matplotlib , Licensee agrees to be bound by the terms and conditions of this License Agreement. ++++++++++4th party dependencies++++++++++ Dependency: Cycler:0.10.0, License: BSD 3-Clause "New" Copyright (c) 2015, matplotlib project All rights reserved. See Appendix M ++++++++++++++++++ Dependency: Kiwisolver:1.3.2, License: BSD Copyright (c) 2013, Nucleic Development Team All rights reserved. See Appendix M ++++++++++++++++++++++ Dependency: Numpy:1.21.2 , License: BSD Copyright (c) 2005-2021, NumPy Developers. All rights reserved. See Appendix M ++++++++++++++++ Dependency: Pyparsing:2.4.7 , License: MIT license Copyright (c) 2003-2021 Paul T. McGuire MIT License See Appendix G ++++++++++++++++

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Dependency: Six:1.16.0 , License: MIT license Copyright (c) 2010-2021 Benjamin Peterson MIT License See Appendix G ++++++++++++++++ Dependency: Pillow:8.4.0, License:Historical Permission Notice and Disclaimer Pillow is the friendly PIL fork. It is Copyright © 2010-2021 by Alex Clark and contributors Like PIL, Pillow is licensed under the open source HPND License: By obtaining, using, and/or copying this software and/or its associated documentation, you agree that you have read, understood, and will comply with the following terms and conditions: Permission to use, copy, modify, and distribute this software and its associated documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies, and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Secret Labs AB or the author not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. SECRET LABS AB AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL SECRET LABS AB OR THE AUTHOR BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ++++++++++++++++ Dependency: python-dateutil:2.8.2, License: Apache Software License, BSD License Copyright 2017- Paul Ganssle Copyright 2017- dateutil contributors (see AUTHORS file) Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/ LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. The above license applies to all contributions after 2017-12-01, as well as all contributions that have been re-licensed (see AUTHORS file for the list of contributors who have re-licensed their code). ---------- ---------- dateutil - Extensions to the standard Python datetime module. Copyright (c) 2003-2011 - Gustavo Niemeyer Copyright (c) 2012-2014 - Tomi Pieviläinen Copyright (c) 2014-2016 - Yaron de Leeuw Copyright (c) 2015- - Paul Ganssle Copyright (c) 2015- - dateutil contributors (see AUTHORS file) All rights reserved. See Appendix M The above BSD License Applies to all code, even that also covered by Apache 2.0. ++++++++++++++++ https://matplotlib.org/stable/users/ license.html License Matplotlib only uses BSD compatible code, and its license is based on the PSF license. See the Open Source Initiative licenses page for details on individual licenses. Non-BSD compatible licenses (e.g., LGPL) are acceptable in matplotlib toolkits. For a discussion of the motivations behind the licencing choice, see Licenses. Copyright Policy John Hunter began matplotlib around 2003. Since shortly before his passing in 2012, Michael Droettboom has been the lead maintainer of matplotlib, but, as has always been the case, matplotlib is the work of many. Prior to July of 2013, and the 1.3.0 release,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		the copyright of the source code was held by John Hunter. As of July 2013, and the 1.3.0 release, matplotlib has moved to a shared copyright model. matplotlib uses a shared copyright model. Each contributor maintains copyright over their contributions to matplotlib. But, it is important to note that these contributions are typically only changes to the repositories. Thus, the matplotlib source code, in its entirety, is not the copyright of any single person or institution. Instead, it is the collective copyright of the entire matplotlib Development Team. If individual contributors want to maintain a record of what changes/ contributions they have specific copyright on, they should indicate their copyright in the commit message of the change, when they commit the change to one of the matplotlib repositories. The Matplotlib Development Team is the set of all contributors to the matplotlib project. A full list can be obtained from the git version control logs. License agreement for matplotlib 3.4.3 1. This LICENSE AGREEMENT is between the Matplotlib Development Team ("MDT"), and the Individual or Organization ("Licensee") accessing and otherwise using matplotlib software in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, MDT hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use matplotlib 3.4.3 alone or in any derivative version, provided, however, that MDT's License Agreement and MDT's notice of copyright, i.e., "Copyright (c) 2012-2013 Matplotlib Development Team; All Rights Reserved" are retained in matplotlib 3.4.3 alone or in any derivative version prepared by Licensee. 3. In the event Licensee prepares a derivative work that is based on or incorporates matplotlib 3.4.3 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to matplotlib 3.4.3. 4. MDT is making matplotlib 3.4.3 available to Licensee on an "AS IS" basis. MDT MAKES NO

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, MDT MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF MATPLOTLIB 3.4.3 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. MDT SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF MATPLOTLIB 3.4.3 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING MATPLOTLIB 3.4.3, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between MDT and Licensee. This License Agreement does not grant permission to use MDT trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By copying, installing or otherwise using matplotlib 3.4.3, Licensee agrees to be bound by the terms and conditions of this License Agreement. License agreement for matplotlib versions prior to 1.3.0 1. This LICENSE AGREEMENT is between John D. Hunter ("JDH"), and the Individual or Organization ("Licensee") accessing and otherwise using matplotlib software in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, JDH hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use matplotlib 3.4.3 alone or in any derivative version, provided, however, that JDH's License Agreement and JDH's notice of copyright, i.e., "Copyright (c) 2002-2009 John D. Hunter; All Rights Reserved" are retained in matplotlib 3.4.3 alone or in any derivative version prepared by Licensee. 3. In the event Licensee prepares a derivative work that is based on or incorporates matplotlib 3.4.3 or any part thereof, and wants to make the derivative work available to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to matplotlib 3.4.3. 4. JDH is making matplotlib 3.4.3 available to Licensee on an "AS IS" basis. JDH MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, JDH MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF MATPLOTLIB 3.4.3 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. JDH SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF MATPLOTLIB 3.4.3 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING MATPLOTLIB 3.4.3, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between JDH and Licensee. This License Agreement does not grant permission to use JDH trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By copying, installing or otherwise using matplotlib 3.4.3, Licensee agrees to be bound by the terms and conditions of this License Agreement.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
CloudBees, Inc.	Matrix Authorization Strategy Plug-in 2.6.8 Matrix Authorization Strategy Plug-in 3.1.5	matrix-auth-plugin,2.6.8 (Matrix Authorization Strategy) The MIT License (MIT) Copyright 2013 CloudBees Copyright 2017 Daniel Beck Copyright (c) 2004-2010, Sun Microsystems, Inc., Kohsuke Kawaguchi, Yahoo! Inc., Peter Hayes, Tom Huybrechts Copyright (c) 2004-2017 Sun Microsystems, Inc., Kohsuke Kawaguchi, Yahoo! Inc., Peter Hayes, Tom Huybrechts, Daniel Beck Copyright (c) 2018 Configuration as Code Plugin Developers Begin license text. Copyright MIT License See Appendix G End license text.
CloudBees, Inc.	Matrix Authorization Strategy Plug-in 3.1.2	matrix-auth-plugin,2.6.8 (Matrix Authorization Strategy) The MIT License (MIT) Copyright 2013 CloudBees Copyright 2017 Daniel Beck Copyright (c) 2004-2010, Sun Microsystems, Inc., Kohsuke Kawaguchi, Yahoo! Inc., Peter Hayes, Tom Huybrechts Copyright (c) 2004-2017 Sun Microsystems, Inc., Kohsuke Kawaguchi, Yahoo! Inc., Peter Hayes, Tom Huybrechts, Daniel Beck Copyright (c) 2018 Configuration as Code Plugin Developers Begin license text. Copyright MIT License See Appendix G End license text.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Matplotlib Development Team	matplotlib 3.2.2	Copyright (c) 2012- Matplotlib Development Team; All Rights Reserved License agreement for matplotlib versions 1.3.0 and later ========== 1. This LICENSE AGREEMENT is between the Matplotlib Development Team ("MDT"), and the Individual or Organization ("Licensee") accessing and otherwise using matplotlib software in source or binary form and its associated documentation. 2. Subject to the terms and conditions of this License Agreement, MDT hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use matplotlib alone or in any derivative version, provided, however, that MDT's License Agreement and MDT's notice of copyright, i.e., "Copyright (c) 2012- Matplotlib Development Team; All Rights Reserved" are retained in matplotlib alone or in any derivative version prepared by Licensee. 3. In the event Licensee prepares a derivative work that is based on or incorporates matplotlib or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to matplotlib . 4. MDT is making matplotlib available to Licensee on an "AS IS" basis. MDT MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, MDT MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF MATPLOTLIB

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		WILL NOT INFRINGE ANY THIRD PARTY RIGHTS. 5. MDT SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF MATPLOTLIB FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING MATPLOTLIB , OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF. 6. This License Agreement will automatically terminate upon a material breach of its terms and conditions. 7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between MDT and Licensee. This License Agreement does not grant permission to use MDT trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party. 8. By copying, installing or otherwise using matplotlib , Licensee agrees to be bound by the terms and conditions of this License Agreement. ++++++++++4th party dependencies++++++++++ Dependency: Cycler:0.10.0, License: BSD 3-Clause "New" Copyright (c) 2015, matplotlib project All rights reserved. See Appendix M ++++++++++++++++++ Dependency: Kiwisolver:1.1.0, License: BSD Copyright (c) 2013, Nucleic Development Team All rights reserved. See Appendix M ++++++++++++++++++++++ Dependency: Numpy:1.18.1 , License: BSD

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2005-2019, NumPy Developers. All rights reserved. See Appendix M ++++++++++++++++++++ pillow, v7.1.2, The Python Imaging Library (PIL) is Copyright © 1997-2011 by Secret Labs AB Copyright © 1995-2011 by Fredrik Lundh Pillow is the friendly PIL fork. It is Copyright © 2010-2020 by Alex Clark and contributors Like PIL, Pillow is licensed under the open source PIL Software License: By obtaining, using, and/or copying this software and/or its associated documentation, you agree that you have read, understood, and will comply with the following terms and conditions: Permission to use, copy, modify, and distribute this software and its associated documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appears in all copies, and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of Secret Labs AB or the author not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. SECRET LABS AB AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL SECRET LABS AB OR THE AUTHOR BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		PERFORMANCE OF THIS SOFTWARE. ++++++++++++++++ Dependency: Pyparsing:2.4.6 , License: MIT license Copyright (c) 2003-2019 Paul T. McGuire MIT License See Appendix G ++++++++++++++++++ Dependency: Python-dateutil:2.6.1 , License: Simplified BSD Copyright (c) 2003-2011 - Gustavo Niemeyer Copyright (c) 2012-2014 - Tomi Pieviläinen Copyright (c) 2014-2016 - Yaron de Leeuw Copyright (c) 2015- - Paul Ganssle All rights reserved. See Appendix M
CloudBees, Inc.	Matrix Authorization Strategy Plug-in 2.6.8	matrix-auth-plugin,2.6.8 (Matrix Authorization Strategy) The MIT License (MIT) Copyright 2013 CloudBees Copyright 2017 Daniel Beck Copyright (c) 2004-2010, Sun Microsystems, Inc., Kohsuke Kawaguchi, Yahoo! Inc., Peter Hayes, Tom Huybrechts Copyright (c) 2004-2017 Sun Microsystems, Inc., Kohsuke Kawaguchi, Yahoo! Inc., Peter Hayes, Tom Huybrechts, Daniel Beck Copyright (c) 2018 Configuration as Code Plugin Developers Begin license text. Copyright MIT License See Appendix G End license text.
Pivotal Software, Inc	Micrometer 1.0.5 Micrometer 1.1.4	APACHE 2.0 - See Appendix E
Pivotal Software, Inc	Micrometer 1.5.1	APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	Micrometer 1.5.2	APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
VMware	micrometer-registry-prometheus 1.9.1 micrometer-registry-prometheus 1.9.5	Micrometer Registry Prometheus Copyright (c) 2017-Present VMware, Inc. All Rights Reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- This product contains a modified portion of 'io.netty.util.internal.logging', in the Netty/Common library distributed by The Netty Project: * Copyright 2013 The Netty Project * License: Apache License v2.0 * Homepage: https://netty.io This product contains a modified portion of 'StringUtils.isBlank()', in the Commons Lang library distributed by The Apache Software Foundation: * Copyright 2001-2019 The Apache Software Foundation * License: Apache License v2.0 * Homepage: https://commons.apache.org/proper/commons-lang/ This product contains a modified portion of 'JsonUtf8Writer', in the Moshi library distributed by Square, Inc: * Copyright 2010 Google Inc. * License: Apache License v2.0 * Homepage: https://github.com/square/moshi This product contains a modified portion of

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		the 'org.springframework.lang' package in the Spring Framework library, distributed by VMware, Inc: * Copyright 2002-2019 the original author or authors. * License: Apache License v2.0 * Homepage: https://spring.io/projects/spring-framework APACHE 2.0 - See Appendix E --- ---- Fourth Party Runtime Dependencies --- ---- "micrometer-core" (io.micrometer:micrometer-core) Copyright 2002-2019 the original author or authors. Copyright 2010 Google Inc. The comments and initialization of {@code REPLACEMENT_CHARS} came Copyright 2017,2020 Pivotal Software, Inc. Copyright (c) 2004-2011 QOS.ch Copyright 2012,2017 The Netty Project Copyright 2017,2021 VMware, Inc. Apache License, Version 2.0 --- ---- "HdrHistogram" (org.hdrhistogram:HdrHistogram) The code in this repository code was Written by Gil Tene, Michael Barker, and Matt Warren, and released to the public domain, as explained at http://creativecommons.org/publicdomain/zero/1.0/ For users of this code who wish to consume it under the "BSD" license rather than under the public domain or CC0 contribution text mentioned above, the code found under this directory is *also* provided under the following license (commonly referred to as the BSD 2-Clause License). This license does not detract from the above stated release of the code into the public domain, and simply represents an additional license granted by the Author. ** Beginning of "BSD 2-Clause License" text. ** Copyright (c) 2012, 2013, 2014, 2015, 2016 Gil Tene Copyright (c) 2014 Michael Barker Copyright (c) 2014 Matt Warren All rights reserved. See Appendix M ---------- "LatencyUtils" (org.latencyutils:LatencyUtils) * This code was Written by Gil Tene of Azul Systems, and released to the * public domain, as explained at http://creativecommons.org/publicdomain/zero/1.0/ For users of this code who wish to consume it under the "BSD" license rather than under the public domain or CC0 contribution text mentioned above, the code found under this directory is *also* provided under the following license (commonly referred to as the BSD 2-Clause License). This license does not detract from the above stated release of the code into the public domain, and simply represents an additional license granted by the Author. ** Beginning of "BSD 2-Clause License" text. **

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2012, 2013, 2014 Gil Tene All rights reserved. See Appendix M ---------- "Prometheus Java Simpleclient Common" (io.prometheus:simpleclient_common) "Prometheus Java Simpleclient" (io.prometheus:simpleclient) Prometheus instrumentation library for JVM applications Copyright 2012-2015 The Prometheus Authors Copyright 2012 Andrew Wang (andrew@umbrant.com) This product includes software developed at Boxever Ltd. (http://www.boxever.com/). This product includes software developed at SoundCloud Ltd. (http://soundcloud.com/). This product includes software developed as part of the Ocelli project by Netflix Inc. (https://github.com/Netflix/ocelli/). Apache License 2.0 ----------

Tim Wood	Moment 2.29.1	`URL for License and Copyright Notice - https://github.com/moment/moment/blob/2.29.1/LICENSE`
		
		`Copyright (c) JS Foundation and other contributors`
		
		MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
original author or authors	MyBatis Spring Boot Starter 2.1.3	Copyright 2015-2018 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Apache License - See Appendix E ---------- 4th Party Dependencies: spring-boot, v1.5.10.RELEASE: Apache 2.0 mybatis.spring.boot, v1.3.2 Apache 2.0 mybatis, v3.4.6 : Apache 2.0 mybatis-spring: v1.3.2 Apache 2.0 MyBatis Spring Copyright 2010-2013 This product includes software developed by The MyBatis Team (http://www.mybatis.org/). iBATIS This product includes software developed by The Apache Software Foundation (http://www.apache.org/). Copyright 2010 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See the License for the specific language governing permissions and limitations under the License. Spring Framework All Spring projects are licensed under the terms of the Apache License, Version 2.0 Copyright 2002-2010 the original author or authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Donald Becker, et al	net-tools 2.0-0.52.20160912git	GNU General Public License, Version 2 (GPL-2.0) - See Appendix A Copyright (C) 19yy This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details. You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 675 Mass Ave, Cambridge, MA 02139, USA. Also add information on how to contact you by electronic and paper mail. If the program is interactive, make it output a short notice like this when it starts in an interactive mode: Gnomovision version 69, Copyright (C) 19yy name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details. The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker. , 1 April 1989 Ty Coon, President of Vice This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Igor Sysoev	Nginx 1.14.2	* Copyright (C) 2002-2016 Igor Sysoev * Copyright (C) 2011-2016 Nginx, Inc. * All rights reserved. * See Appendix M Below is the 4th party dependency license info. ********** OpenSSL Library ******* Copyright (c) 1998-2018 The OpenSSL Project Copyright (c) 1995-1998 Eric A. Young, Tim J. Hudson All rights reserved. DESCRIPTION The OpenSSL Project is a collaborative effort to develop a robust, commercial-grade, fully featured, and Open Source toolkit implementing the Transport Layer Security (TLS) protocols (including SSLv3) as well as a full-strength general purpose cryptographic library. OpenSSL is descended from the SSLeay library developed by Eric A. Young and Tim J. Hudson. The OpenSSL toolkit is licensed under a dual-license (the OpenSSL license plus the SSLeay license), which means that you are free to get and use it for commercial and non-commercial purposes as long as you fulfill the conditions of both licenses. LICENSE ISSUES ========== The OpenSSL toolkit stays under a double license, i.e. both the conditions of the OpenSSL License and the original SSLeay license apply to the toolkit. See below for the actual license texts. OpenSSL License --- * Copyright (c) 1998-2018 The OpenSSL Project. All rights reserved. * * See Appendix M * * This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com). * Original SSLeay License --- /* Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com) * All rights reserved. * * This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscapes SSL. * * This library is free for commercial and non-commercial use as long as the following conditions are aheared to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com). * * Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used. This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package. * *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See Appendix M * * The licence and distribution terms for any publically available version or derivative of this code cannot be changed. i.e. this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.] */ PCRE2 LICENCE ---------- PCRE2 is a library of functions to support regular expressions whose syntax and semantics are as close as possible to those of the Perl 5 language. Release 10 of PCRE2 is distributed under the terms of the "BSD" licence, as specified below, with one exemption for certain binary redistributions. The documentation for PCRE2, supplied in the "doc" directory, is distributed under the same terms as the software itself. The data in the testdata directory is not copyrighted and is in the public domain. The basic library functions are written in C and are freestanding. Also included in the distribution is a just-in-time compiler that can be used to optimize pattern matching. This is an optional feature that can be omitted when the library is built. THE BASIC LIBRARY FUNCTIONS ---------- Written by: Philip Hazel Email local part: ph10 Email domain: cam.ac.uk University of Cambridge Computing Service, Cambridge, England. Copyright (c) 1997-2018 University of Cambridge All rights reserved. PCRE2 JUST-IN-TIME COMPILATION SUPPORT ---------- Written by: Zoltan Herczeg Email local part: hzmester Emain domain: freemail.hu Copyright(c) 2010-2018 Zoltan Herczeg All rights reserved. STACK-LESS JUST-IN-TIME COMPILER ---------- Written by: Zoltan Herczeg Email local part: hzmester Emain domain: freemail.hu Copyright(c) 2009-2018 Zoltan Herczeg All rights reserved. THE "BSD" LICENCE ---------- See Appendix M ---------- The second condition in the BSD licence (covering binary redistributions) does not apply all the way down a chain of software. If binary package A includes PCRE2, it must respect the condition, but if package B is software that includes package A, the condition is not imposed on package B unless it uses PCRE2 independently. End *********ZLIB ********** Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler Zlib License - See Appendix H

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
connect2id	Nimbus JOSE+JWT 8.8	From file COPYRIGHT.txt: Nimbus JOSE + JWT Copyright 2012 - 2020, Connect2id Ltd. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Licensed under the Apache License, Version 2.0 (the "License") APACHE 2.0 - See Appendix E 4th party dependencies, all licensed under Apache 2.0 json-smart 2.3 - licensed under Apache 2.0 /* * Copyright 2011 JSON-SMART authors * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ accessors-smart 1.2 - licensed under Apache 2.0 /* * Copyright 2011 JSON-SMART authors * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ jcip-annotations 1.0-1 - licensed under Apache 2.0 /* * Copyright 2013 Stephen Connolly. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ asm 7.1 - ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Insecure	NMAP 7.70-5	The following attribution text was taken from Component nmap Version 7.70 / ********** ********** * COPYING -- Describes the terms under which Nmap is distributed. * * * **********IMPORTANT NMAP LICENSE TERMS********** * * * The Nmap Security Scanner is (C) 1996-2018 Insecure.Com LLC ("The Nmap * * Project"). Nmap is also a registered trademark of the Nmap Project. * * This program is free software; you may redistribute and/or modify it * * under the terms of the GNU General Public License as published by the * * Free Software Foundation; Version 2 ("GPL"), BUT ONLY WITH ALL OF THE * * CLARIFICATIONS AND EXCEPTIONS DESCRIBED HEREIN. This guarantees your * * right to use, modify, and redistribute this software under certain * * conditions. If you wish to embed Nmap technology into proprietary * * software, we sell alternative licenses (contact sales@nmap.com). * * Dozens of software vendors already license Nmap technology such as * * host discovery, port scanning, OS detection, version detection, and * * the Nmap Scripting Engine. * * * * Note that the GPL places important restrictions on "derivative works", * * yet it does not provide a detailed definition of that term. To avoid * * misunderstandings, we interpret that term as broadly as copyright law * * allows. For example, we consider an application to constitute a * * derivative work for the purpose of this license if it does any of the * * following with any software or content covered by this license * * ("Covered Software"): * * * * o Integrates source code from Covered Software. * * * * o Reads or includes copyrighted data files, such as Nmap's nmap-os-db * * or nmap-service-probes. * * * * o Is designed specifically to execute Covered Software and parse the * * results (as opposed to typical shell or execution-menu apps, which will * * execute anything you tell them to). * * * * o Includes Covered Software in a proprietary executable installer. The * * installers produced by InstallShield are an example of this. Including * * Nmap with other software in compressed or archival form does not * * trigger this provision, provided appropriate open source decompression * * or de-archiving software is widely available for no charge. For the * * purposes of this license, an installer is considered to include Covered * * Software even if it actually retrieves a copy of Covered Software from * * another source during runtime (such as by downloading it from the * * Internet). * * * * o Links (statically or dynamically) to a library which does any of the * * above. * * * * o Executes a helper program, module, or script to do any of the above. * * * * This list is not exclusive, but is meant to clarify our interpretation * * of derived works with some common examples. Other people may interpret * * the plain GPL differently, so we consider this a special

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		exception to * * the GPL that we apply to Covered Software. Works which meet any of * * these conditions must conform to all of the terms of this license, * * particularly including the GPL Section 3 requirements of providing * * source code and allowing free redistribution of the work as a whole. * * * * As another special exception to the GPL terms, the Nmap Project grants * * permission to link the code of this program with any version of the * * OpenSSL library which is distributed under a license identical to that * * listed in the included docs/licenses/OpenSSL.txt file, and distribute * * linked combinations including the two. * * * * The Nmap Project has permission to redistribute Npcap, a packet * * capturing driver and library for the Microsoft Windows platform. * * Npcap is a separate work with it's own license rather than this Nmap * * license. Since the Npcap license does not permit redistribution * * without special permission, our Nmap Windows binary packages which * * contain Npcap may not be redistributed without special permission. * * * * Any redistribution of Covered Software, including any derived works, * * must obey and carry forward all of the terms of this license, including * * obeying all GPL rules and restrictions. For example, source code of * * the whole work must be provided and free redistribution must be * * allowed. All GPL references to "this License", are to be treated as * * including the terms and conditions of this license text as well. * * * * Because this license imposes special exceptions to the GPL, Covered * * Work may not be combined (even as part of a larger work) with plain GPL * * software. The terms, conditions, and exceptions of this license must * * be included as well. This license is incompatible with some other open * * source licenses as well. In some cases we can relicense portions of * * Nmap or grant special permissions to use it in other open source * * software. Please contact fyodor@nmap.org with any such requests. * * Similarly, we don't incorporate incompatible open source software into * * Covered Software without special permission from the copyright holders. * * * * If you have any questions about the licensing restrictions on using * * Nmap in other works, we are happy to help. As mentioned above, we also * * offer an alternative license to integrate Nmap into proprietary * * applications and appliances. These contracts have been sold to dozens * * of software vendors, and generally include a perpetual license as well * * as providing support and updates. They also fund the continued * * development of Nmap. Please email sales@nmap.com for further * * information. * * * * If you have received a written license agreement or contract for * * Covered Software stating terms other than these, you may choose to use * * and redistribute Covered Software under those terms instead of these. * * * * Source is provided to this software because we believe users have a * * right to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		know exactly what a program is going to do before they run it. * * This also allows you to audit the software for security holes. * * * * Source code also allows you to port Nmap to new platforms, fix bugs, * * and add new features. You are highly encouraged to send your changes * * to the dev@nmap.org mailing list for possible incorporation into the * * main distribution. By sending these changes to Fyodor or one of the * * Insecure.Org development mailing lists, or checking them into the Nmap * * source code repository, it is understood (unless you specify * * otherwise) that you are offering the Nmap Project the unlimited, * * non-exclusive right to reuse, modify, and relicense the code. Nmap * * will always be available Open Source, but this is important because * * the inability to relicense code has caused devastating problems for * * other Free Software projects (such as KDE and NASM). We also * * occasionally relicense the code to third parties as discussed above. * * If you wish to specify special license conditions of your * * contributions, just say so when you send them. * * * * This program is distributed in the hope that it will be useful, but * * WITHOUT ANY WARRANTY; without even the implied warranty of * * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the Nmap * * license file for more details (it's in a COPYING file included with * * Nmap, and also available from https://svn.nmap.org/nmap/COPYING) * * * ********** **********/ GNU General Public License --- - Table of Contents * GNU GENERAL PUBLIC LICENSE o Preamble o TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION o How to Apply These Terms to Your New Programs --- - GNU GENERAL PUBLIC LICENSE Version 2, refer to Appendix A

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Square, Inc.	OkHttp 4.2.2	Copyright 2013 Twitter, Inc. Licensed under the Apache License, Version 2.0 (the "License") APACHE 2.0 - See Appendix E Copyright 2016 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License") APACHE 2.0 - See Appendix E Copyright (C) 2013 The Android Open Source Project Licensed under the Apache License, Version 2.0 (the "License") APACHE 2.0 - See Appendix E Copyright 2016 Google Inc. Licensed under the Apache License, Version 2.0 (the "License") APACHE 2.0 - See Appendix E Copyright (C) 2013 Square, Inc. Copyright (C) 2011 The Guava Authors Licensed under the Apache License, Version 2.0 (the "License") APACHE 2.0 - See Appendix E Copyright (C) 2012 Square, Inc. Copyright (C) 2012 The Android Open Source Project Licensed under the Apache License, Version 2.0 (the "License") APACHE 2.0 - See Appendix E ---------- TOP-LEVEL LICENSE TEXT for com.squareup.okhttp3:okhttp:4.2.2 Apache License, Version 2.0 - See Appendix E ---------- FOURTH-PARTY DEPENDENCY #1 com.squareup.okio:okio:2.2.2 FOURTH-PARTY DEPENDENCY #1 COPYRIGHT NOTICES Copyright (C) 2018 Square, Inc. and others. Licensed under the Apache License, Version 2.0 (the "License"); ---------- FOURTH-PARTY DEPENDENCY #2 org.jetbrains:annotations:13.0 FOURTH-PARTY DEPENDENCY #2 COPYRIGHT NOTICES Copyright 2000-2019 JetBrains s.r.o. Use of this source code is governed by the Apache 2.0 license that can be found in the LICENSE file. ---------- FOURTH-PARTY DEPENDENCY #3 org.jetbrains.kotlin:kotlin-stdlib:1.3.50 FOURTH-PARTY DEPENDENCY #4 org.jetbrains.kotlin:kotlin-stdlib-common:1.3.50 COMMON COPYRIGHT NOTICES Copyright 2010-2018 JetBrains s.r.o. Licensed under the Apache License, Version 2.0 (the "License"); See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Square, Inc.	OkHttp 4.7.2	TOP-LEVEL COPYRIGHT NOTICE for com.squareup.okhttp3:okhttp:4.7.2 Copyright 2013 Twitter, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright 2016 Square Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2013 The Android Open Source Project Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2016 Google Inc. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (C) 2013 Square, Inc. Copyright (C) 2011 The Guava Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright (C) 2012 Square, Inc. Copyright (C) 2012 The Android Open Source Project Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------separator--------- TOP-LEVEL LICENSE TEXT for com.squareup.okhttp3:okhttp:4.7.2 Apache License, Version 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Square, Inc.	OkHttp 4.9.0	Copyright 2019 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Licensed under the Apache License, Version 2.0 (the "License"); See Appendix E Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Square, Inc.	OkHttp 4.10.0	Copyright 2019 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. APACHE 2.0 - See Appendix E 4th Party Dependencies ------------------ com.squareup.okio Apache 2.0 Copyright 2019 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. -- --- kotlin-stdlib Apache 2.0 Copyright 2010-2020 JetBrains s.r.o. and Kotlin Programming Language contributors. *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License.
	Okio 2.8.0	Copyright (C) 2013 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. https://github.com/square/okio/blob/okio-parent-2.6.0/LICENSE.txt APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Netty Project	netty 4.1.50.Final	APACHE 2.0 - See Appendix E ========== The Netty Project ========== Please visit the Netty web site for more information: * https://netty.io/ Copyright 2014 The Netty Project The Netty Project licenses this file to you under the Apache License, version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Also, please refer to each LICENSE.<component>.txt file, which is located in the 'license' directory of the distribution file, for the license terms of the components that this product depends on. ---------- This product contains the extensions to Java Collections Framework which has been derived from the works by JSR-166 EG, Doug Lea, and Jason T. Greene: * LICENSE: * license/LICENSE.jsr166y.txt (Public Domain) The person or persons who have associated work with this document (the "Dedicator" or "Certifier") hereby either (a) certifies that, to the best of his knowledge, the work of authorship identified is in the public domain of the country from which the work is published, or (b) hereby dedicates whatever copyright the dedicators holds in the work of authorship identified below (the "Work") to the public domain. A certifier, moreover, dedicates any copyright interest he may have in the associated work, and for these purposes, is described as a "dedicator" below. A certifier has taken reasonable steps to verify the copyright status of this work. Certifier recognizes that his good faith efforts may not shield him from liability if in fact the work certified is not in the public domain. Dedicator makes this dedication for the benefit of the public at large and to the detriment of the Dedicator's heirs and successors. Dedicator intends this dedication to be an overt act of relinquishment in perpetuity of all present and future rights under copyright law, whether vested or contingent, in the Work. Dedicator understands that such relinquishment of all rights

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		includes the relinquishment of all rights to enforce (by lawsuit or otherwise) those copyrights in the Work. Dedicator recognizes that, once placed in the public domain, the Work may be freely reproduced, distributed, transmitted, used, modified, built upon, or otherwise exploited by anyone for any purpose, commercial or non-commercial, and in any way, including by methods that have not yet been invented or conceived. * HOMEPAGE: * http://gee.cs.oswego.edu/cgi-bin/viewcvs.cgi/jsr166/ * http://viewvc.jboss.org/cgi-bin/viewvc.cgi/jbosscache/experimental/jsr166/ This product contains a modified version of Robert Harder's Public Domain Base64 Encoder and Decoder, which can be obtained at: * LICENSE: * license/LICENSE.base64.txt (Public Domain) The person or persons who have associated work with this document (the "Dedicator" or "Certifier") hereby either (a) certifies that, to the best of his knowledge, the work of authorship identified is in the public domain of the country from which the work is published, or (b) hereby dedicates whatever copyright the dedicators holds in the work of authorship identified below (the "Work") to the public domain. A certifier, moreover, dedicates any copyright interest he may have in the associated work, and for these purposes, is described as a "dedicator" below. A certifier has taken reasonable steps to verify the copyright status of this work. Certifier recognizes that his good faith efforts may not shield him from liability if in fact the work certified is not in the public domain. Dedicator makes this dedication for the benefit of the public at large and to the detriment of the Dedicator's heirs and successors. Dedicator intends this dedication to be an overt act of relinquishment in perpetuate of all present and future rights under copyright law, whether vested or contingent, in the Work. Dedicator understands that such relinquishment of all rights includes the relinquishment of all rights to enforce (by lawsuit or otherwise) those copyrights in the Work. Dedicator recognizes that, once placed in the public domain, the Work may be freely reproduced, distributed, transmitted, used, modified, built upon, or otherwise exploited by anyone for any purpose, commercial or non-commercial, and in any way, including by methods that have not yet been invented or conceived. * HOMEPAGE: * http://iharder.sourceforge.net/current/java/base64/ This product contains a modified portion of 'Webbit', an event based WebSocket and HTTP server, which can be obtained at:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* LICENSE: * license/LICENSE.webbit.txt (BSD License) (BSD License: http://www.opensource.org/licenses/bsd-license) Copyright (c) 2011, Joe Walnes, Aslak Hellesøy and contributors All rights reserved. See Appendix M * HOMEPAGE: * https://github.com/joewalnes/webbit This product contains a modified portion of 'SLF4J', a simple logging facade for Java, which can be obtained at: * LICENSE: * license/LICENSE.slf4j.txt (MIT License) /* * Copyright (c) 2004-2007 QOS.ch * All rights reserved. * MIT License See Appendix G */ * HOMEPAGE: * http://www.slf4j.org/ This product contains a modified portion of 'Apache Harmony', an open source Java SE, which can be obtained at: * NOTICE: * license/NOTICE.harmony.txt Apache Harmony Copyright 2006, 2010 The Apache Software Foundation. This product includes software developed at The Apache Software Foundation (http://www.apache.org/). * LICENSE: * license/LICENSE.harmony.txt (Apache License 2.0) * HOMEPAGE: * http://archive.apache.org/dist/harmony/ This product contains a modified portion of 'jbzip2', a Java bzip2 compression and decompression library written by Matthew J. Francis. It can be obtained at: * LICENSE: * license/LICENSE.jbzip2.txt (MIT License) Copyright (c) 2010-2011 Matthew J. Francis and Contributors of the jbzip2 Project MIT License See Appendix G * HOMEPAGE: * https://code.google.com/p/jbzip2/ This product contains a modified portion of 'libdivsufsort', a C API library to construct the suffix array

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		and the Burrows-Wheeler transformed string for any input string of a constant-size alphabet written by Yuta Mori. It can be obtained at: * LICENSE: * license/LICENSE.libdivsufsort.txt (MIT License) Copyright (c) 2003-2008 Yuta Mori All Rights Reserved. MIT License See Appendix G * HOMEPAGE: * https://github.com/y-256/libdivsufsort This product contains a modified portion of Nitsan Wakart's 'JCTools', Java Concurrency Tools for the JVM, which can be obtained at: * LICENSE: * license/LICENSE.jctools.txt (ASL2 License) * HOMEPAGE: * https://github.com/JCTools/JCTools This product optionally depends on 'JZlib', a re-implementation of zlib in pure Java, which can be obtained at: * LICENSE: * license/LICENSE.jzlib.txt (BSD style License) Copyright (c) 2000,2001,2002,2003,2004 ymnk, JCraft,Inc. All rights reserved. See Appendix M * HOMEPAGE: * http://www.jcraft.com/jzlib/ This product optionally depends on 'Compress-LZF', a Java library for encoding and decoding data in LZF format, written by Tatu Saloranta. It can be obtained at: * LICENSE: * license/LICENSE.compress-lzf.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/ning/compress This product optionally depends on 'lz4', a LZ4 Java compression and decompression library written by Adrien Grand. It can be obtained at: * LICENSE: * license/LICENSE.lz4.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jpountz/lz4-java This product optionally depends on 'lzma-java', a LZMA Java compression and decompression library, which can be obtained at: * LICENSE: * license/LICENSE.lzma-java.txt (Apache License 2.0) * HOMEPAGE:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* https://github.com/jponge/lzma-java This product contains a modified portion of 'jfastlz', a Java port of FastLZ compression and decompression library written by William Kinney. It can be obtained at: * LICENSE: * license/LICENSE.jfastlz.txt (MIT License) The MIT License Copyright (c) 2009 William Kinney MIT License See Appendix G * HOMEPAGE: * https://code.google.com/p/jfastlz/ This product contains a modified portion of and optionally depends on 'Protocol Buffers', Google's data interchange format, which can be obtained at: * LICENSE: * license/LICENSE.protobuf.txt (New BSD License) Protocol Buffers - Google's data interchange format Copyright 2013 Google Inc. All rights reserved. https://developers.google.com/protocol-buffers/ See Appendix M Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license. * HOMEPAGE: * https://github.com/google/protobuf This product optionally depends on 'Bouncy Castle Crypto APIs' to generate a temporary self-signed X.509 certificate when the JVM does not provide the equivalent functionality. It can be obtained at: * LICENSE: * license/LICENSE.bouncycastle.txt (MIT License) The MIT License (MIT) Copyright (c) 2000 - 2013 The Legion of the Bouncy Castle Inc. (http://www.bouncycastle.org) MIT License See Appendix G * HOMEPAGE: * http://www.bouncycastle.org/ This product optionally depends on 'Snappy', a compression library produced by Google Inc, which can be obtained at: * LICENSE: * license/LICENSE.snappy.txt (New BSD License) Copyright 2011, Google Inc. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See Appendix M * HOMEPAGE: * https://github.com/google/snappy This product optionally depends on 'JBoss Marshalling', an alternative Java serialization API, which can be obtained at: * LICENSE: * license/LICENSE.jboss-marshalling.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jboss-remoting/jboss-marshalling This product optionally depends on 'Caliper', Google's micro- benchmarking framework, which can be obtained at: * LICENSE: * license/LICENSE.caliper.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/google/caliper This product optionally depends on 'Apache Commons Logging', a logging framework, which can be obtained at: * LICENSE: * license/LICENSE.commons-logging.txt (Apache License 2.0) * HOMEPAGE: * http://commons.apache.org/logging/ This product optionally depends on 'Apache Log4J', a logging framework, which can be obtained at: * LICENSE: * license/LICENSE.log4j.txt (Apache License 2.0) * HOMEPAGE: * http://logging.apache.org/log4j/ This product optionally depends on 'Aalto XML', an ultra-high performance non-blocking XML processor, which can be obtained at: * LICENSE: * license/LICENSE.aalto-xml.txt (Apache License 2.0) * HOMEPAGE: * http://wiki.fasterxml.com/AaltoHome This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Twitter. It can be obtained at: * LICENSE: * license/LICENSE.hpack.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/twitter/hpack This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Cory Benfield. It can be obtained at:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* LICENSE: * license/LICENSE.hyper-hpack.txt (MIT License) The MIT License (MIT) Copyright (c) 2014 Cory Benfield MIT License See Appendix G * HOMEPAGE: * https://github.com/python-hyper/hpack/ This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Tatsuhiro Tsujikawa. It can be obtained at: * LICENSE: * license/LICENSE.nghttp2-hpack.txt (MIT License) The MIT License Copyright (c) 2012, 2014, 2015, 2016 Tatsuhiro Tsujikawa Copyright (c) 2012, 2014, 2015, 2016 nghttp2 contributors MIT License See Appendix G * HOMEPAGE: * https://github.com/nghttp2/nghttp2/ This product contains a modified portion of 'Apache Commons Lang', a Java library provides utilities for the java.lang API, which can be obtained at: * LICENSE: * license/LICENSE.commons-lang.txt (Apache License 2.0) * HOMEPAGE: * https://commons.apache.org/proper/commons-lang/ This product contains the Maven wrapper scripts from 'Maven Wrapper', that provides an easy way to ensure a user has everything necessary to run the Maven build. * LICENSE: * license/LICENSE.mvn-wrapper.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/takari/maven-wrapper This product contains the dnsinfo.h header file, that provides a way to retrieve the system DNS configuration on MacOS. This private header is also used by Apple's open source mDNSResponder (https://opensource.apple.com/tarballs/mDNSResponder/). * LICENSE: * license/LICENSE.dnsinfo.txt (Apache License 2.0) * HOMEPAGE: * http://www.opensource.apple.com/source/configd/configd-453.19/dnsinfo/dnsinfo.h

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Netty Project	netty 4.1.63.Final	Netty (io.netty:netty-*) Copyright 2012,2021 The Netty Project Copyright 2014 Twitter, Inc. Copyright (c) 2011, Joe Walnes and contributors Copyright (c) 2008-2009 Bjoern Hoehrmann Copyright (c) 2004-2011 QOS.ch ---------- APACHE 2.0 - See Appendix E ---------- The Netty Project ========== Please visit the Netty web site for more information: * https://netty.io/ Copyright 2014 The Netty Project The Netty Project licenses this file to you under the Apache License, version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at: https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Also, please refer to each LICENSE..txt file, which is located in the 'license' directory of the distribution file, for the license terms of the components that this product depends on. ---------- ---- This product contains the extensions to Java Collections Framework which has been derived from the works by JSR-166 EG, Doug Lea, and Jason T. Greene: * LICENSE: * license/LICENSE.jsr166y.txt (Public Domain) The person or persons who have associated work with this document (the "Dedicator" or "Certifier") hereby either (a) certifies that, to the best of his knowledge, the work of authorship identified is in the public domain of the country from which the work is published, or (b) hereby dedicates whatever copyright the dedicators holds in the work of authorship identified below (the "Work") to the public domain. A certifier, moreover, dedicates any copyright interest he may have in the associated work, and for these purposes, is described as a "dedicator" below. A certifier has taken reasonable steps to verify the copyright status of this work. Certifier recognizes that his good faith efforts may not shield him from liability if in fact the work certified is not in the public domain. Dedicator makes this dedication for the benefit of the public at large and to the detriment of the Dedicator's heirs and successors. Dedicator intends this dedication to be an overt act of relinquishment in perpetuity of all present and future rights under copyright law, whether vested or contingent, in the Work. Dedicator understands that such relinquishment of all rights includes the relinquishment of all rights to enforce (by lawsuit or otherwise) those copyrights in the Work. Dedicator recognizes that, once placed in the public domain, the Work may be freely reproduced, distributed, transmitted, used, modified,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		built upon, or otherwise exploited by anyone for any purpose, commercial or non-commercial, and in any way, including by methods that have not yet been invented or conceived. * HOMEPAGE: * http://gee.cs.oswego.edu/cgi-bin/viewcvs.cgi/jsr166/ * http://viewvc.jboss.org/cgi-bin/viewvc.cgi/jbosscache/experimental/jsr166/ This product contains a modified version of Robert Harder's Public Domain Base64 Encoder and Decoder, which can be obtained at: * LICENSE: * license/LICENSE.base64.txt (Public Domain) The person or persons who have associated work with this document (the "Dedicator" or "Certifier") hereby either (a) certifies that, to the best of his knowledge, the work of authorship identified is in the public domain of the country from which the work is published, or (b) hereby dedicates whatever copyright the dedicators holds in the work of authorship identified below (the "Work") to the public domain. A certifier, moreover, dedicates any copyright interest he may have in the associated work, and for these purposes, is described as a "dedicator" below. A certifier has taken reasonable steps to verify the copyright status of this work. Certifier recognizes that his good faith efforts may not shield him from liability if in fact the work certified is not in the public domain. Dedicator makes this dedication for the benefit of the public at large and to the detriment of the Dedicator's heirs and successors. Dedicator intends this dedication to be an overt act of relinquishment in perpetuity of all present and future rights under copyright law, whether vested or contingent, in the Work. Dedicator understands that such relinquishment of all rights includes the relinquishment of all rights to enforce (by lawsuit or otherwise) those copyrights in the Work. Dedicator recognizes that, once placed in the public domain, the Work may be freely reproduced, distributed, transmitted, used, modified, built upon, or otherwise exploited by anyone for any purpose, commercial or non-commercial, and in any way, including by methods that have not yet been invented or conceived. * HOMEPAGE: * http://iharder.sourceforge.net/current/java/base64/ This product contains a modified portion of 'Webbit', an event based WebSocket and HTTP server, which can be obtained at: * LICENSE: * license/LICENSE.webbit.txt (BSD License) (BSD License: https://www.opensource.org/licenses/bsd-license) Copyright (c) 2011, Joe Walnes, Aslak Hellesøy and contributors All rights reserved. See Appendix M * HOMEPAGE: * https://github.com/joewalnes/webbit This product contains a modified portion of 'SLF4J', a simple logging facade for Java, which can be obtained at: * LICENSE: * license/LICENSE.slf4j.txt (MIT License) /* * Copyright (c) 2004-2007 QOS.ch * All rights reserved. * *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		MIT License See Appendix G */ * HOMEPAGE: * https://www.slf4j.org/ This product contains a modified portion of 'Apache Harmony', an open source Java SE, which can be obtained at: * NOTICE: * license/NOTICE.harmony.txt Apache Harmony Copyright 2006, 2010 The Apache Software Foundation. This product includes software developed at The Apache Software Foundation (https://www.apache.org/). * LICENSE: * license/LICENSE.harmony.txt (Apache License 2.0) * HOMEPAGE: * https://archive.apache.org/dist/harmony/ This product contains a modified portion of 'jbzip2', a Java bzip2 compression and decompression library written by Matthew J. Francis. It can be obtained at: * LICENSE: * license/LICENSE.jbzip2.txt (MIT License) Copyright (c) 2010-2011 Matthew J. Francis and Contributors of the jbzip2 Project MIT License See Appendix G * HOMEPAGE: * https://code.google.com/p/jbzip2/ This product contains a modified portion of 'libdivsufsort', a C API library to construct the suffix array and the Burrows-Wheeler transformed string for any input string of a constant-size alphabet written by Yuta Mori. It can be obtained at: * LICENSE: * license/LICENSE.libdivsufsort.txt (MIT License) Copyright (c) 2003-2008 Yuta Mori All Rights Reserved. MIT License See Appendix G * HOMEPAGE: * https://github.com/y-256/libdivsufsort This product contains a modified portion of Nitsan Wakart's 'JCTools', Java Concurrency Tools for the JVM, which can be obtained at: * LICENSE: * license/LICENSE.jctools.txt (ASL2 License) * HOMEPAGE: * https://github.com/JCTools/JCTools This product optionally depends on 'JZlib', a re-implementation of zlib in pure Java, which can be obtained at: * LICENSE: * license/LICENSE.jzlib.txt (BSD style License) Copyright (c) 2000,2001,2002,2003,2004 ymnk, JCraft,Inc. All rights reserved. See Appendix M * HOMEPAGE: * http://www.jcraft.com/jzlib/ This product optionally depends on 'Compress-LZF', a Java library for encoding and decoding data in LZF format, written by Tatu Saloranta. It can be obtained at: * LICENSE: * license/LICENSE.compress-lzf.txt (Apache License 2.0) Copyright 2009-2010 Ning, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS,WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. * HOMEPAGE: *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		https://github.com/ning/compress This product optionally depends on 'lz4', a LZ4 Java compression and decompression library written by Adrien Grand. It can be obtained at: * LICENSE: * license/LICENSE.lz4.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jpountz/lz4-java This product optionally depends on 'lzma-java', a LZMA Java compression and decompression library, which can be obtained at: * LICENSE: * license/LICENSE.lzma-java.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jponge/lzma-java This product contains a modified portion of 'jfastlz', a Java port of FastLZ compression and decompression library written by William Kinney. It can be obtained at: * LICENSE: * license/LICENSE.jfastlz.txt (MIT License) The MIT License Copyright (c) 2009 William Kinney MIT License See Appendix G * HOMEPAGE: * https://code.google.com/p/jfastlz/ This product contains a modified portion of and optionally depends on 'Protocol Buffers', Google's data interchange format, which can be obtained at: * LICENSE: * license/LICENSE.protobuf.txt (New BSD License) Protocol Buffers - Google's data interchange format Copyright 2013 Google Inc. All rights reserved. https://developers.google.com/protocol-buffers/ See Appendix M Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license. * HOMEPAGE: * https://github.com/google/protobuf This product optionally depends on 'Bouncy Castle Crypto APIs' to generate a temporary self-signed X.509 certificate when the JVM does not provide the equivalent functionality. It can be obtained at: * LICENSE: * license/LICENSE.bouncycastle.txt (MIT License) The MIT License (MIT) Copyright (c) 2000 - 2013 The Legion of the Bouncy Castle Inc. (https://www.bouncycastle.org) MIT License See Appendix G * HOMEPAGE: * https://www.bouncycastle.org/ This product optionally depends on 'Snappy', a compression library produced by Google Inc, which can be obtained at: * LICENSE: * license/LICENSE.snappy.txt (New BSD License) Copyright 2011, Google Inc. All rights reserved. See Appendix M . * HOMEPAGE: * https://github.com/google/snappy This product optionally depends on 'JBoss Marshalling', an alternative Java serialization API, which can be obtained at: * LICENSE: * license/LICENSE.jboss-marshalling.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jboss-remoting/jboss-marshalling This product optionally depends on 'Caliper', Google's micro-benchmarking framework, which can be obtained at: *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		LICENSE: * license/LICENSE.caliper.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/google/caliper This product optionally depends on 'Apache Commons Logging', a logging framework, which can be obtained at: * LICENSE: * license/LICENSE.commons-logging.txt (Apache License 2.0) * HOMEPAGE: * https://commons.apache.org/logging/ This product optionally depends on 'Apache Log4J', a logging framework, which can be obtained at: * LICENSE: * license/LICENSE.log4j.txt (Apache License 2.0) * HOMEPAGE: * https://logging.apache.org/log4j/ This product optionally depends on 'Aalto XML', an ultra-high performance non-blocking XML processor, which can be obtained at: * LICENSE: * license/LICENSE.aalto-xml.txt (Apache License 2.0) This copy of Aalto XML processor is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: https://www.apache.org/licenses/ A copy is also included with both the the downloadable source code package and jar that contains class bytecodes, as file "ASL 2.0". In both cases, that file should be located next to this file: in source distribution the location should be "release-notes/asl"; and in jar "META-INF/" * HOMEPAGE: * http://wiki.fasterxml.com/AaltoHome This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Twitter. It can be obtained at: * LICENSE: * license/LICENSE.hpack.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/twitter/hpack This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Cory Benfield. It can be obtained at: * LICENSE: * license/LICENSE.hyper-hpack.txt (MIT License) The MIT License (MIT) Copyright (c) 2014 Cory Benfield MIT License See Appendix G * HOMEPAGE: * https://github.com/python-hyper/hpack/ This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Tatsuhiro Tsujikawa. It can be obtained at: * LICENSE: * license/LICENSE.nghttp2-hpack.txt (MIT License) The MIT License Copyright (c) 2012, 2014, 2015, 2016 Tatsuhiro Tsujikawa Copyright (c) 2012, 2014, 2015, 2016 nghttp2 contributors MIT License See Appendix G * HOMEPAGE: * https://github.com/nghttp2/nghttp2/ This product contains a modified portion of 'Apache Commons Lang', a Java library provides utilities for the java.lang API, which can be obtained at: * LICENSE: * license/LICENSE.commons-lang.txt (Apache License 2.0) * HOMEPAGE: * https://commons.apache.org/proper/commons-lang/ This product contains the Maven wrapper scripts from 'Maven Wrapper', that provides an easy way to ensure a user has everything necessary to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		run the Maven build. * LICENSE: * license/LICENSE.mvn-wrapper.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/takari/maven-wrapper This product contains the dnsinfo.h header file, that provides a way to retrieve the system DNS configuration on MacOS. This private header is also used by Apple's open source mDNSResponder (https://opensource.apple.com/tarballs/mDNSResponder/). * LICENSE: * license/LICENSE.dnsinfo.txt (Apple Public Source License 2.0) /* * Copyright (c) 2004-2006, 2008, 2009, 2011 Apple Inc. All rights reserved. * * @APPLE_LICENSE_HEADER_START@ * * This file contains Original Code and/or Modifications of Original Code * as defined in and that are subject to the Apple Public Source License * Version 2.0 (the 'License'). You may not use this file except in * compliance with the License. Please obtain a copy of the License at * https://www.opensource.apple.com/apsl/ and read it before using this * file. * * The Original Code and all software distributed under the License are * distributed on an 'AS IS' basis, WITHOUT WARRANTY OF ANY KIND, EITHER * EXPRESS OR IMPLIED, AND APPLE HEREBY DISCLAIMS ALL SUCH WARRANTIES, * INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, * FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT OR NON-INFRINGEMENT. * Please see the License for the specific language governing rights and * limitations under the License. * * @APPLE_LICENSE_HEADER_END@ */ * HOMEPAGE: * https://www.opensource.apple.com/source/configd/configd-453.19/dnsinfo/dnsinfo.h
NumPy Developers	NumPy 1.21.2	`Copyright (c) 2005-2021, NumPy Developers. All rights reserved.` See Appendix M
NumPy Developers	NumPy 1.19.0	`Copyright (c) 2005-2020, NumPy Developers. All rights reserved.` See Appendix M
Opentracing.Io	OpenTracing API for Java 0.33.0	opentracing-util: 0.33.0, Apache 2.0 opentracing-mock: 0.33.0, Apache 2.0 opentracing-api: 0.33.0, Apache 2.0 opentracing-noop: 0.33.0, Apache 2.0 Copyright 2016-2019 The OpenTracing Authors ---------- APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
opentracing-contrib	OpenTracing Spring Jaeger Starter 0.1.4	APACHE 2.0 - See Appendix E 4 th -party dependencies: jaeger-core v0.27.0 opentracing-api v0.31.0 opentracing-spring-tracer-configuration-starter v0.1.0 spring-boot-autoconfigure (optional) v1.5.12.RELEASE spring-boot-configuration-processor (optional) v1.5.12.RELEASE All are licensed under Apache 2.0. APACHE 2.0 - See Appendix E
opentracing-contrib	OpenTracing Spring Jaeger Starter 3.1.1	APACHE 2.0 - See Appendix E Below are 4th party dependencies. ++ jaeger-core, v0.27.0, Apache 2.0 No copyright nor notice.txt in the source code, but only license text which is pure Apache 2.0 license text. ++ opentracing-api, v0.31.0, Apache 2.0 No copyright nor notice.txt in the source code, but only license text which is pure Apache 2.0 license text. ++ opentracing-spring-tracer-configuration-starter, v0.1.0, Apache 2.0 No copyright nor notice.txt in the source code, but only license text which is pure Apache 2.0 license text. ++ spring-boot-autoconfigure (optional), v1.5.12.RELEASE, Apache 2.0 No copyright nor notice.txt in the source code, but only license text which is pure Apache 2.0 license text. ++ spring-boot-configuration-processor (optional), v1.5.12.RELEASE, Apache 2.0 No copyright nor notice.txt in the source code, but only license text which is pure Apache 2.0 license text.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
opentracing-contrib	OpenTracing Spring Jaeger Starter 3.1.2	APACHE 2.0 - See Appendix E Below are 4th party dependencies. ++ jaeger-core, v0.27.0, Apache 2.0 No copyright nor notice.txt in the source code, but only license text which is pure Apache 2.0 license text. ++ opentracing-api, v0.31.0, Apache 2.0 No copyright nor notice.txt in the source code, but only license text which is pure Apache 2.0 license text. ++ opentracing-spring-tracer-configuration-starter, v0.1.0, Apache 2.0 No copyright nor notice.txt in the source code, but only license text which is pure Apache 2.0 license text. ++++ ++ spring-boot-autoconfigure (optional), v1.5.12.RELEASE, Apache 2.0 No copyright nor notice.txt in the source code, but only license text which is pure Apache 2.0 license text. ++ spring-boot-configuration-processor (optional), v1.5.12.RELEASE, Apache 2.0 No copyright nor notice.txt in the source code, but only license text which is pure Apache 2.0 license text.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Opentracing.Io	OpenTracing Spring Jaeger Web Starter 2.0.3	Public Licenses & Copyright Notices: Dependency Tree: +- io.opentracing.contrib:opentracing-spring-jaeger-web-starter:jar:3.2.2:compile | +- io.opentracing.contrib:opentracing-spring-jaeger-starter:jar:3.2.2:compile | | +- io.opentracing.contrib:opentracing-spring-tracer-configuration-starter:jar:0.4.0:compile | | \- io.jaegertracing:jaeger-client:jar:1.1.0:compile | | +- io.jaegertracing:jaeger-thrift:jar:1.4.0:compile | | | +- org.apache.thrift:libthrift:jar:0.13.0:compile | | | | \- javax.annotation:javax.annotation-api:jar:1.3.2:compile | | | \- com.squareup.okhttp3:okhttp:jar:3.14.9:compile | | | \- com.squareup.okio:okio:jar:1.17.2:compile | | +- io.jaegertracing:jaeger-core:jar:1.1.0:compile | | | \- com.google.code.gson:gson:jar:2.8.6:compile | | \- io.jaegertracing:jaeger-tracerresolver:jar:1.1.0:compile | \- io.opentracing.contrib:opentracing-spring-web-starter:jar:4.0.0:compile | +- io.opentracing.contrib:opentracing-spring-web:jar:4.0.0:compile | | \- io.opentracing.contrib:opentracing-web-servlet-filter:jar:0.4.0:compile | \- io.opentracing.contrib:opentracing-tracerresolver:jar:0.1.8:compile License: Apache License Version 2.0, January 2004 Artifacts: io.opentracing.contrib.* io.jaegertracing.* com.squareup.* com.google.code.gson:gson org.apache.thrift.* Licenses (Include all Licenses here. Do not provide links.): APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyrights: Artifact: 1. io.opentracing.contrib:opentracing-spring-jaeger-web-starter 2. io.opentracing.contrib:opentracing-spring-web-starter 3. io.opentracing.contrib:opentracing-spring-web 4. io.opentracing.contrib:opentracing-web-servlet-filter 5. io.opentracing.contrib:opentracing-tracerresolver 6. io.opentracing.contrib:opentracing-spring-tracer-configuration-starter 7. io.opentracing.contrib:opentracing-spring-jaeger-starter Copyright (Get copyright information from the source): ---------- ---------- -------- Artifact: 1. io.jaegertracing:jaeger-client 2. io.jaegertracing:jaeger-thrift 3. io.jaegertracing:jaeger-core 4. io.jaegertracing:jaeger-tracerresolver Copyright: /* * Copyright (c) 2018, The Jaeger Authors * * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except * in compliance with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software distributed under the License * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express * or implied. See the License for the specific language governing permissions and limitations under * the License. */

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- ---------- -------- Artifact: org.apache.thrift:libthrift Copyright: Apache Thrift Copyright (C) 2006 - 2019, The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ---------- ---------- -------- Artifact: 1. com.squareup.okhttp3:okhttp 2. com.squareup.okio:okio Copyright: /* * Copyright (C) 2020 Square, Inc. and others. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- ---------- -------- Artifact:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		1. com.google.code.gson:gson Copyright: /* * Copyright (C) 2018 The Gson authors * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Opentracing.Io	OpenTracing Spring Jaeger Web Starter 2.0.3	Copyright 2018-2019 The OpenTracing Authors APACHE 2.0 - See Appendix E ---------- FOURTH-PARTY DEPENDENCY #1 com.squareup.okio:okio:1.13.0 FOURTH-PARTY DEPENDENCY #1 COPYRIGHT NOTICES Copyright (C) 2017 Square, Inc. APACHE 2.0 - See Appendix E ---------- FOURTH-PARTY DEPENDENCY #2 io.jaegertracing:jaeger-client:0.35.1 FOURTH-PARTY DEPENDENCY #2 COPYRIGHT NOTICES Copyright (c) 2018, The Jaeger Authors APACHE 2.0 - See Appendix E ---------- FOURTH-PARTY DEPENDENCY #3 io.jaegertracing:jaeger-core:0.35.1 FOURTH-PARTY DEPENDENCY #4 io.jaegertracing:jaeger-thrift:0.35.1 FOURTH-PARTY DEPENDENCY #5 io.jaegertracing:jaeger-tracerresolver:0.35.1 COMMON COPYRIGHT NOTICES Copyright (c) 2017, Uber Technologies, Inc Copyright (c) 2018, The Jaeger Authors APACHE 2.0 - See Appendix E ---------- FOURTH-PARTY DEPENDENCY #6 io.opentracing.contrib:opentracing-spring-jaeger-starter:2.0.3 FOURTH-PARTY DEPENDENCY #7 io.opentracing.contrib:opentracing-spring-tracer-configuration-starter:0.2.0 COMMON COPYRIGHT NOTICES Copyright 2018-2019 The OpenTracing Authors APACHE 2.0 - See Appendix E ---------- FOURTH-PARTY DEPENDENCY #8 io.opentracing.contrib:opentracing-spring-web:2.1.0 FOURTH-PARTY DEPENDENCY #9 io.opentracing.contrib:opentracing-spring-web-starter:2.1.0 COMMON COPYRIGHT NOTICES Copyright 2016-2019 The OpenTracing Authors APACHE 2.0 - See Appendix E ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #10 io.opentracing.contrib:opentracing-tracerresolver:0.1.6 FOURTH-PARTY DEPENDENCY #10 COPYRIGHT NOTICES Copyright 2017-2019 The OpenTracing Authors APACHE 2.0 - See Appendix E --- FOURTH-PARTY DEPENDENCY #11 io.opentracing.contrib:opentracing-web-servlet-filter:0.3.0 FOURTH-PARTY DEPENDENCY #11 COPYRIGHT NOTICES Copyright 2016-2018 The OpenTracing Authors APACHE 2.0 - See Appendix E --- FOURTH-PARTY DEPENDENCY #12 io.opentracing:opentracing-api:0.32.0 FOURTH-PARTY DEPENDENCY #13 io.opentracing:opentracing-noop:0.32.0 FOURTH-PARTY DEPENDENCY #14 io.opentracing:opentracing-util:0.32.0 COMMON COPYRIGHT NOTICES Copyright 2016-2019 The OpenTracing Authors APACHE 2.0 - See Appendix E --- FOURTH-PARTY DEPENDENCY #15 org.apache.thrift:libthrift:0.12.0 FOURTH-PARTY DEPENDENCY #15 COPYRIGHT NOTICE Apache Thrift Copyright (C) 2006 - 2019, The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). --- FOURTH-PARTY DEPENDENCY #16 org.springframework.boot:spring-boot:2.1.7.RELEASE FOURTH-PARTY DEPENDENCY #17 org.springframework.boot:spring-boot-autoconfigure:2.1.7.RELEASE COMMON COPYRIGHT NOTICE Copyright © 2019 Pivotal Software, Inc.. All rights reserved. --- FOURTH-PARTY DEPENDENCY #18 org.springframework:spring-aop:5.1.9.RELEASE

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #19 org.springframework:spring-beans:5.1.9.RELEASE FOURTH-PARTY DEPENDENCY #20 org.springframework:spring-context:5.1.9.RELEASE FOURTH-PARTY DEPENDENCY #21 org.springframework:spring-core:5.1.9.RELEASE FOURTH-PARTY DEPENDENCY #22 org.springframework:spring-expression:5.1.9.RELEASE FOURTH-PARTY DEPENDENCY #23 org.springframework:spring-jcl:5.1.9.RELEASE COMMON COPYRIGHT NOTICE Copyright 2002-2019 the original author or authors. --- FOURTH-PARTY DEPENDENCY #1 com.squareup.okio:okio:1.13.0 FOURTH-PARTY DEPENDENCY #2 io.jaegertracing:jaeger-client:0.35.1 FOURTH-PARTY DEPENDENCY #3 io.jaegertracing:jaeger-core:0.35.1 FOURTH-PARTY DEPENDENCY #4 io.jaegertracing:jaeger-thrift:0.35.1 FOURTH-PARTY DEPENDENCY #5 io.jaegertracing:jaeger-tracerresolver:0.35.1 FOURTH-PARTY DEPENDENCY #6 io.opentracing.contrib:opentracing-spring-jaeger-starter:2.0.3 FOURTH-PARTY DEPENDENCY #7 io.opentracing.contrib:opentracing-spring-tracer-configuration-starter:0.2.0 FOURTH-PARTY DEPENDENCY #8 io.opentracing.contrib:opentracing-spring-web:2.1.0 FOURTH-PARTY DEPENDENCY #9 io.opentracing.contrib:opentracing-spring-web-starter:2.1.0 FOURTH-PARTY DEPENDENCY #10 io.opentracing.contrib:opentracing-tracerresolver:0.1.6 FOURTH-PARTY DEPENDENCY #11 io.opentracing.contrib:opentracing-web-servlet-filter:0.3.0 FOURTH-PARTY DEPENDENCY #12 io.opentracing:opentracing-api:0.32.0 FOURTH-PARTY DEPENDENCY #13 io.opentracing:opentracing-noop:0.32.0 FOURTH-PARTY DEPENDENCY #14 io.opentracing:opentracing-util:0.32.0 FOURTH-PARTY DEPENDENCY #15 org.apache.thrift:libthrift:0.12.0 FOURTH-PARTY DEPENDENCY #16 org.springframework.boot:spring-boot:2.1.7.RELEASE

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #17 org.springframework.boot:spring-boot-autoconfigure:2.1.7.RELEASE FOURTH-PARTY DEPENDENCY #18 org.springframework:spring-aop:5.1.9.RELEASE FOURTH-PARTY DEPENDENCY #19 org.springframework:spring-beans:5.1.9.RELEASE FOURTH-PARTY DEPENDENCY #20 org.springframework:spring-context:5.1.9.RELEASE FOURTH-PARTY DEPENDENCY #21 org.springframework:spring-core:5.1.9.RELEASE FOURTH-PARTY DEPENDENCY #22 org.springframework:spring-expression:5.1.9.RELEASE FOURTH-PARTY DEPENDENCY #23 org.springframework:spring-jcl:5.1.9.RELEASE COMMON LICENSE TEXT APACHE 2.0 - See Appendix E --- FOURTH-PARTY DEPENDENCY #24 org.slf4j:slf4j-api:1.7.26 FOURTH-PARTY DEPENDENCY #24 COPYRIGHT NOTICES and LICENSE TEXT Copyright (c) 2004-2017 QOS.ch All rights reserved. MIT - See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Opentracing.Io	OpenTracing Spring Jaeger Web Starter 3.0.1	TOP-LEVEL COPYRIGHT NOTICE for io.opentracing.contrib:opentracing-spring-web-starter:3.0.1 © 2019 Pivotal Software, Inc. All Rights Reserved /** * Copyright 2016-2019 The OpenTracing Authors * * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except * in compliance with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software distributed under the License * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express * or implied. See the License for the specific language governing permissions and limitations under * the License. */ APACHE 2.0 - See Appendix E FOURTH-PARTY DEPENDENCY #1 io.opentracing.contrib:opentracing-spring-tracer-configuration-starter:0.3.1 FOURTH-PARTY DEPENDENCY #1 COPYRIGHT NOTICES /** * Copyright 2018-2019 The OpenTracing Authors * * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except * in compliance with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software distributed under the License * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express * or implied. See the License for the specific language governing permissions and limitations under * the License. */ FOURTH-PARTY DEPENDENCY #2 io.opentracing.contrib:opentracing-spring-web:3.0.1 FOURTH-PARTY DEPENDENCY #3 io.opentracing:opentracing-api:0.33.0 FOURTH-PARTY DEPENDENCY #4 io.opentracing:opentracing-noop:0.33.0 FOURTH-PARTY DEPENDENCY #5 io.opentracing:opentracing-util:0.33.0 COMMON Copyright /** * Copyright 2016-2019 The OpenTracing Authors * * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except * in compliance with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software distributed under the License * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express * or implied. See the License for the specific language governing permissions and limitations under * the License. */ FOURTH-PARTY DEPENDENCY #6 io.opentracing.contrib:opentracing-tracerresolver:0.1.8 FOURTH-PARTY DEPENDENCY #6 Copyright Notice /* * Copyright 2017-2018 The OpenTracing Authors * *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ FOURTH-PARTY DEPENDENCY #7 io.opentracing.contrib:opentracing-web-servlet-filter:0.4.0 FOURTH-PARTY DEPENDENCY #7 Copyright Notice /* * Copyright 2016-2018 The OpenTracing Authors * * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except * in compliance with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software distributed under the License * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express * or implied. See the License for the specific language governing permissions and limitations under * the License. */ FOURTH-PARTY DEPENDENCY #8 org.springframework.boot:spring-boot:2.2.4.RELEASE FOURTH-PARTY DEPENDENCY #9 org.springframework.boot:spring-boot-autoconfigure:2.2.4.RELEASE FOURTH-PARTY DEPENDENCY #10 org.springframework:spring-aop:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #11 org.springframework:spring-beans:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #12 org.springframework:spring-context:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #13 org.springframework:spring-core:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #14 org.springframework:spring-expression:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #15 org.springframework:spring-jcl:5.2.3.RELEASE COMMON Copyright /* * Copyright 2012-2019 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #1 io.opentracing.contrib:opentracing-spring-tracer-configuration-starter:0.3.1 FOURTH-PARTY DEPENDENCY #2 io.opentracing.contrib:opentracing-spring-web:3.0.1 FOURTH-PARTY DEPENDENCY #3 io.opentracing:opentracing-api:0.33.0 FOURTH-PARTY DEPENDENCY #4 io.opentracing:opentracing-noop:0.33.0 FOURTH-PARTY DEPENDENCY #5 io.opentracing:opentracing-util:0.33.0 FOURTH-PARTY DEPENDENCY #6 io.opentracing.contrib:opentracing-tracerresolver:0.1.8 FOURTH-PARTY DEPENDENCY #7 io.opentracing.contrib:opentracing-web-servlet-filter:0.4.0 FOURTH-PARTY DEPENDENCY #8 org.springframework.boot:spring-boot:2.2.4.RELEASE FOURTH-PARTY DEPENDENCY #9 org.springframework.boot:spring-boot-autoconfigure:2.2.4.RELEASE FOURTH-PARTY DEPENDENCY #10 org.springframework:spring-aop:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #11 org.springframework:spring-beans:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #12 org.springframework:spring-context:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #13 org.springframework:spring-core:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #14 org.springframework:spring-expression:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #15 org.springframework:spring-jcl:5.2.3.RELEASE COMMON License APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Opentracing.Io	OpenTracing Spring Jaeger Web Starter 3.2.2	Public Licenses and Copyright Notices: +- io.opentracing.contrib:opentracing-spring-jaeger-web-starter:jar:3.2.2:compile | +- io.opentracing.contrib:opentracing-spring-jaeger-starter:jar:3.2.2:compile | | +- io.opentracing.contrib:opentracing-spring-tracer-configuration-starter:jar:0.4.0:compile | | \- io.jaegertracing:jaeger-client:jar:1.1.0:compile | | +- io.jaegertracing:jaeger-thrift:jar:1.4.0:compile | | | +- org.apache.thrift:libthrift:jar:0.13.0:compile | | | | \- javax.annotation:javax.annotation-api:jar:1.3.2:compile | | | \- com.squareup.okhttp3:okhttp:jar:3.14.9:compile | | | \- com.squareup.okio:okio:jar:1.17.2:compile | | +- io.jaegertracing:jaeger-core:jar:1.1.0:compile | | | \- com.google.code.gson:gson:jar:2.8.6:compile | | \- io.jaegertracing:jaeger-tracerresolver:jar:1.1.0:compile | \- io.opentracing.contrib:opentracing-spring-web-starter:jar:4.0.0:compile | +- io.opentracing.contrib:opentracing-spring-web:jar:4.0.0:compile | | \- io.opentracing.contrib:opentracing-web-servlet-filter:jar:0.4.0:compile | \- io.opentracing.contrib:opentracing-tracerresolver:jar:0.1.8:compile License: Apache License Version 2.0, January 2004 Artifacts: io.opentracing.contrib.* io.jaegertracing.* com.squareup.* com.google.code.gson:gson org.apache.thrift.* APACHE 2.0 - See Appendix E Copyrights: 1. io.opentracing.contrib:opentracing-spring-jaeger-web-starter 2. io.opentracing.contrib:opentracing-spring-web-starter 3. io.opentracing.contrib:opentracing-spring-web 4. io.opentracing.contrib:opentracing-web-servlet-filter 5. io.opentracing.contrib:opentracing-tracerresolver

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		6. io.opentracing.contrib:opentracing-spring-tracer-configuration-starter 7. io.opentracing.contrib:opentracing-spring-jaeger-starter Copyright (Get copyright information from the source): <!-- Copyright 2018-2020 The OpenTracing Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --> ---------- Artifact: 1. io.jaegertracing:jaeger-client 2. io.jaegertracing:jaeger-thrift 3. io.jaegertracing:jaeger-core 4. io.jaegertracing:jaeger-tracerresolver Copyright: /* * Copyright (c) 2018, The Jaeger Authors * * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except * in compliance with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		writing, software distributed under the License * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express * or implied. See the License for the specific language governing permissions and limitations under * the License. */ --- --- Artifact: org.apache.thrift:libthrift Copyright: Apache Thrift Copyright (C) 2006 - 2019, The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/) --- --- Artifact: 1. com.squareup.okhttp3:okhttp 2. com.squareup.okio:okio Copyright: /* * Copyright (C) 2020 Square, Inc. and others. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- ---------- Artifact: 1. com.google.code.gson:gson Copyright: /* * Copyright (C) 2018 The Gson authors * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */
opentracing-contrib	OpenTracing Spring Web 0.3.2	APACHE 2.0 - See Appendix E 4 th -party dependency: opentracing-web-servlet-filter v0.1.0 APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Open Web Application Security Project (OWASP)	OWASP Dependency Check 5.2.4	Copyright (c) 2012-2013 Jeremy Long. All Rights Reserved. The licenses for the software listed below can be found in the META-INF/licenses/[dependency name]. This product includes software developed by The Apache Software Foundation (http://www.apache.org/). This product includes software developed by Jquery.com (http://jquery.com/). This product includes software developed by Jonathan Hedley (jsoup.org) This software contains unmodified binary redistributions for H2 database engine (http://www.h2database.com/), which is dual licensed and available under a modified version of the MPL 1.1 (Mozilla Public License) or under the (unmodified) EPL 1.0 (Eclipse Public License). An original copy of the license agreement can be found at: http://www.h2database.com/html/license.html This product includes data from the Common Weakness Enumeration (CWE): http://cwe.mitre.org/ This product downloads and utilizes data from the National Vulnerability Database hosted by NIST: http://nvd.nist.gov/download.cfm ---------- TOP-LEVEL LICENSE TEXT for org.owasp.dependencycheck.gradle.plugin:5.2.4 APACHE 2.0 - See Appendix E ---------- FOURTH-PARTY DEPENDENCY #1 com.esotericsoftware:minlog:1.3 FOURTH-PARTY DEPENDENCY #1 LICENSE and COPYRIGHT NOTICES LICENSE: BSD-3-Clause Copyright (c) 2008, Nathan Sweet All rights reserved. BSD License- See Appendix N ---------- FOURTH-PARTY DEPENDENCY #2 com.github.package-url:packageurl-java:1.1.1 FOURTH-PARTY DEPENDENCY #2 LICENSE and COPYRIGHT NOTICES MIT - See Appendix G ---------- FOURTH-PARTY DEPENDENCY #3 com.github.spullara.mustache.java:compiler:0.8.17 FOURTH-PARTY DEPENDENCY #3 COPYRIGHT NOTICES Copyright 2002-2010 the original author or authors.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Mustache.java factory with a fallback mechanism for locating resources. (Some parts are based on DefaultMustacheFactory code that is Copyright 2010 RightTime, Inc.) @author gw0 [http://gw.tnode.com/] <gw.2012@tnode.com> ---------- FOURTH-PARTY DEPENDENCY #4 com.fasterxml.jackson.core:jackson-annotations:2.10.0 FOURTH-PARTY DEPENDENCY #4 COPYRIGHT NOTICES Copyright © 2008–2019 FasterXML. All rights reserved. ---------- FOURTH-PARTY DEPENDENCY #5 com.google.code.findbugs:jsr305:3.0.2 FOURTH-PARTY DEPENDENCY #5 COPYRIGHT NOTICES <!-- Copyright 1992-2002 HaL Computer Systems, Inc., O'Reilly & Associates, Inc., ArborText, Inc., Fujitsu Software Corporation, Norman Walsh, Sun Microsystems, Inc., and the Organization for the Advancement of Structured Information Standards (OASIS). $Id: dbcentx.mod,v 1.1 2005/11/28 21:36:47 daveho Exp $ Permission to use, copy, modify and distribute the DocBook DTD and its accompanying documentation for any purpose and without fee is hereby granted in perpetuity, provided that the above copyright notice and this paragraph appear in all copies. The copyright holders make no representation about the suitability of the DTD for any purpose. It is provided "as is" without expressed or implied warranty. If you modify the DocBook DTD in any way, except for declaring and referencing additional sets of general entities and declaring additional notations, label your DTD as a variant of DocBook. See the maintenance documentation for more information. Please direct all questions, bug reports, or suggestions for changes to the docbook@lists.oasis-open.org mailing list. For more information, see http://www.oasis-open.org/docbook/. --> FindBugs

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (C) 2011 University of Maryland This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Copyright (c) 2000-2005 INRIA, France Telecom All rights reserved. See Appendix M Copyright 2013 Google Inc. All Rights Reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Copyright (c) 2000, 2007 IBM Corporation and others. All rights reserved. This program and the accompanying material are made available under the terms of the Eclipse Public License v1.0 which accompanies this distribution, and is available at http://www.eclipse.org/legal/epl-v10.html Contributors: IBM Corporation - initial API and implementation Contributions to FindBugs Copyright (C) 2014, Andrey Loskutov This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Contributions to FindBugs Copyright (C) 2014, Kevin Lubick

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributions to FindBugs Copyright (C) 2009, Tomás Pollak ---------separator--------- FOURTH-PARTY DEPENDENCY #6 com.google.code.gson:gson:2.8.5 FOURTH-PARTY DEPENDENCY #6 COPYRIGHT NOTICES Copyright (C) 2017 Google Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Copyright (C) 2018 Gson Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Copyright (C) 2018 The Gson Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 ---------- FOURTH-PARTY DEPENDENCY #7 com.google.errorprone:error_prone_annotations:2.3.2 FOURTH-PARTY DEPENDENCY #7 COPYRIGHT NOTICES Copyright 2018 The Error Prone Authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Copyright (C) 2009 The Guava Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 ---------- FOURTH-PARTY DEPENDENCY #8 com.google.guava:failureaccess:1.0.1

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #9 com.google.guava:listenablefuture:9999.0-empty-to-avoid-conflict-with-guava Copyright (C) 2018 The Guava Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 --- FOURTH-PARTY DEPENDENCY #10 com.google.guava:guava:28.1-jre FOURTH-PARTY DEPENDENCY #10 COPYRIGHT TEXT Copyright (C) 2019 The Guava Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 --- FOURTH-PARTY DEPENDENCY #11 com.google.j2objc:j2objc-annotations:1.3 FOURTH-PARTY DEPENDENCY #11 COPYRIGHT NOTICES Copyright (C) 2009-2012, International Business Machines Corporation and others. All Rights Reserved. Copyright (C) 2000-2014, International Business Machines Corporation and others. All Rights Reserved. Android Code Copyright 2005-2008 The Android Open Source Project This product includes software developed as part of The Android Open Source Project (http://source.android.com). Apache Harmony Copyright 2006 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Portions of Harmony were originally developed by Intel Corporation and are licensed to the Apache Software Foundation under the "Software Grant and Corporate Contribution License Agreement", informally known as the "Intel Harmony CLA". Copyright (c) 1995-2014 International Business Machines Corporation and others All rights reserved. MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2002,2003, Stefan Haustein, Oberhausen, Rhld., Germany MIT License See Appendix G NOTICE file for the W3C License. Copyright (c) 2000 World Wide Web Consortium, (Massachusetts Institute of Technology, Institut National de Recherche en Informatique et en Automatique, Keio University). All Rights Reserved. This program is distributed under the W3C's Software Intellectual Property License. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See W3C License http://www.w3.org/Consortium/Legal/ for more details. NOTICE file for the fdlibm License. Copyright (C) 1993 by Sun Microsystems, Inc. All rights reserved. Developed at SunSoft, a Sun Microsystems, Inc. business. Permission to use, copy, modify, and distribute this software is freely granted, provided that this notice is preserved. Copyright (C) 2003, International Business Machines Corporation and others. All Rights Reserved. (C)Copyright IBM Corp. 1996-2005 - All Rights Reserved The original version of this source code and documentation is copyrighted and owned by IBM, These materials are provided under terms of a License Agreement between IBM and Sun. This technology is protected by multiple US and International patents. This notice and attribution to IBM may not to removed. (C)Copyright IBM Corp. 1996-2009 - All Rights Reserved The original version of this source code and documentation is copyrighted and owned by IBM, These materials are provided under terms of a License Agreement between IBM and Sun. This technology is protected by multiple US and International patents. This notice and attribution to IBM may not to removed. Copyright (C) 2003-2004, International Business Machines Corporation and others. All Rights Reserved. Copyright (C) 2004, International Business Machines Corporation and others. All Rights Reserved. Copyright (C) 2009, International Business Machines Corporation and others. All Rights Reserved. Copyright (C) 2009-2010, International Business Machines Corporation and others. All Rights Reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (C) 2010, International Business Machines Corporation and others. All Rights Reserved. (C) Copyright IBM Corp. 1996-2003 - All Rights Reserved The original version of this source code and documentation is copyrighted and owned by IBM, These materials are provided under terms of a License Agreement between IBM and Sun. This technology is protected by multiple US and International patents. This notice and attribution to IBM may not to removed. This locale data is based on the ICU's Vietnamese locale data (rev. 1.38) found at: http://oss.software.ibm.com/cvs/icu/icu/source/data/locales/vi.txt?rev=1.38 (C) Copyright IBM Corp. 1999-2003 - All Rights Reserved The original version of this source code and documentation is copyrighted and owned by IBM, These materials are provided under terms of a License Agreement between IBM and Sun. This technology is protected by multiple US and International patents. This notice and attribution to IBM may not to removed. (C) Copyright Taligent, Inc. 1996 - 1997, All Rights Reserved (C) Copyright IBM Corp. 1996 - 1998, All Rights Reserved The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed. Taligent is a registered trademark of Taligent, Inc. (C) Copyright Taligent, Inc. 1996 , All Rights Reserved (C) Copyright IBM Corp. 1996 - 1998, All Rights Reserved The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed. Taligent is a registered trademark of Taligent, Inc. (C) Copyright Taligent, Inc. 1996, 1997 - , All Rights Reserved (C) Copyright IBM Corp. 1996 - 1998, All Rights Reserved The original version of this source code and documentation is copyrighted and owned by Taligent,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed. Taligent is a registered trademark of Taligent, Inc. (C) Copyright Taligent, Inc. 1996, 1997 - , All Rights Reserved (C) Copyright IBM Corp. 1996 - 1999, All Rights Reserved The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed. Taligent is a registered trademark of Taligent, Inc. (C) Copyright Taligent, Inc. 1996, 1997 - , All Rights Reserved (C) Copyright IBM Corp. 1996 - 2002, All Rights Reserved The original version of this source code and documentation is copyrighted and owned by Taligent, Inc., a wholly-owned subsidiary of IBM. These materials are provided under terms of a License Agreement between Taligent and Sun. This technology is protected by multiple US and International patents. This notice and attribution to Taligent may not be removed. Taligent is a registered trademark of Taligent, Inc. ---------- FOURTH-PARTY DEPENDENCY #12 com.h3xstream.retirejs:retirejs-core:3.0.1 FOURTH-PARTY DEPENDENCY #12 COPYRIGHT NOTICES Copyright © 2018. All rights reserved. FOURTH-PARTY DEPENDENCY #12 LICESNE NOTICES GNU LESSER GENERAL PUBLIC LICENSE Version 3, 29 June 2007 Copyright © 2007 Free Software Foundation, Inc. <https://fsf.org/> See Appendix W ---------- FOURTH-PARTY DEPENDENCY #13 com.h2database:h2:1.4.199

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #13 Copyright NOTICE Copyright 2004-2019 H2 Group. Multiple-Licensed under the MPL 2.0, and the EPL 1.0 (http://h2database.com/html/license.html). Initial Developer: H2 Group FOURTH-PARTY DEPENDENCY #13 LICENSE NOTICE Mozilla Public License Version 2.0 - See Appendix S Eclipse Public License - v 1.0 - See Appendix J ---------- FOURTH-PARTY DEPENDENCY #14 com.moandjiezana.toml:toml4j:0.7.2 FOURTH-PARTY DEPENDENCY #14 Copyright and license NOTICE The MIT License (MIT) Copyright (c) 2013-2015 Moandji Ezana MIT - See Appendix G ---------- FOURTH-PARTY DEPENDENCY #15 commons-collections:commons-collections:3.2.2 FOURTH-PARTY DEPENDENCY #15 Copyright NOTICE Apache Commons Collections Copyright 2001-2015 The Apache Software Foundation This product includes software developed by The Apache Software Foundation (http://www.apache.org/). ---------- FOURTH-PARTY DEPENDENCY #16 commons-io:commons-io:2.6 FOURTH-PARTY DEPENDENCY #16 Copyright NOTICE Apache Commons IO Copyright 2002-2017 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ---------- FOURTH-PARTY DEPENDENCY #17 commons-logging:commons-logging:1.2 FOURTH-PARTY DEPENDENCY #17 Copyright NOTICE Apache Commons Logging Copyright 2003-2014 The Apache Software Foundation This product includes software developed at

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The Apache Software Foundation (http://www.apache.org/). ---------- FOURTH-PARTY DEPENDENCY #18 com.sun.activation:jakarta.activation:1.2.1 FOURTH-PARTY DEPENDENCY #18 Copyright NOTICE Notices for Eclipse Project for JAF This content is produced and maintained by the Eclipse Project for JAF project. Project home: https://projects.eclipse.org/projects/ee4j.jaf Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Distribution License v. 1.0, which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: BSD-3-Clause Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/jaf Third-party Content This project leverages the following third party content. JUnit (4.12) License: Eclipse Public License ---------- FOURTH-PARTY DEPENDENCY #19 com.vdurmont:semver4j:3.1.0 FOURTH-PARTY DEPENDENCY #19 Copyright and License NOTICE The MIT License (MIT) Copyright (c) 2015-present Vincent DURMONT <vdurmont@gmail.com> MIT - See Appendix G ---------- FOURTH-PARTY DEPENDENCY #20 javax.inject:javax.inject:1 FOURTH-PARTY DEPENDENCY #20 Copyright NOTICE Copyright (C) 2009 The JSR-330 Expert Group

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 ---------- FOURTH-PARTY DEPENDENCY #21 javax.ws.rs:javax.ws.rs-api:2.0.1 FOURTH-PARTY DEPENDENCY #21 Copyright Notice Copyright (C) 1989, 1991 Free Software Foundation, Inc. ---------- FOURTH-PARTY DEPENDENCY #22 joda-time:joda-time:2.10.3 FOURTH-PARTY DEPENDENCY #22 Copyright Notice Copyright 2017 Stephen Colebourne Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 ---------- FOURTH-PARTY DEPENDENCY #23 org.apache.commons:commons-compress:1.19 FOURTH-PARTY DEPENDENCY #23 Copyright Notice Apache Commons Compress Copyright 2002-2019 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). The files in the package org.apache.commons.compress.archivers.sevenz were derived from the LZMA SDK, version 9.20 (C/ and CPP/7zip/), which has been placed in the public domain: "LZMA SDK is placed in the public domain." (http://www.7-zip.org/sdk.html) ---------- FOURTH-PARTY DEPENDENCY #24 org.apache.commons:commons-jcs-core:2.2.1 FOURTH-PARTY DEPENDENCY #24 Copyright Notice Apache Commons JCS Copyright 2001-2017 The Apache Software Foundation. This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #25 org.apache.commons:commons-lang3:3.8.1 FOURTH-PARTY DEPENDENCY #25 Copyright Notice Apache Commons Lang Copyright 2001-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). © 2019 GitHub, Inc. ---------- FOURTH-PARTY DEPENDENCY #26 org.apache.commons:commons-text:1.8 FOURTH-PARTY DEPENDENCY #26 Copyright Notice Apache Commons Text Copyright 2014-2019 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). ---------- FOURTH-PARTY DEPENDENCY #27 org.apache.commons:commons-lang3:3.8.1 FOURTH-PARTY DEPENDENCY #28 org.apache.lucene:lucene-analyzers-common:8.3.0 FOURTH-PARTY DEPENDENCY #29 org.apache.lucene:lucene-core:8.3.0 FOURTH-PARTY DEPENDENCY #30 org.apache.lucene:lucene-queries:8.3.0 FOURTH-PARTY DEPENDENCY #31 org.apache.lucene:lucene-queryparser:8.3.0 FOURTH-PARTY DEPENDENCY #32 org.apache.lucene:lucene-sandbox:8.3.0 Common Notice Apache Lucene Copyright 2001-2019 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Includes software from other Apache Software Foundation projects, including, but not limited to: - Apache Ant - Apache Jakarta Regexp - Apache Commons - Apache Xerces ICU4J, (under analysis/icu) is licensed under an MIT styles license and Copyright (c) 1995-2008 International Business Machines Corporation and others Some data files (under analysis/icu/src/data) are derived from Unicode data such as the Unicode Character

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Database. See http://unicode.org/copyright.html for more details. Brics Automaton (under core/src/java/org/apache/lucene/util/automaton) is BSD-licensed, created by Anders Møller. See http://www.brics.dk/automaton/ The levenshtein automata tables (under core/src/java/org/apache/lucene/util/automaton) were automatically generated with the moman/finenight FSA library, created by Jean-Philippe Barrette-LaPierre. This library is available under an MIT license, see http://sites.google.com/site/rrettesite/moman and http://bitbucket.org/jpbarrette/moman/overview/ The class org.apache.lucene.util.WeakIdentityMap was derived from the Apache CXF project and is Apache License 2.0. The Google Code Prettify is Apache License 2.0. See http://code.google.com/p/google-code-prettify/JUnit (junit-4.10) is licensed under the Common Public License v. 1.0 See http://junit.sourceforge.net/cpl-v10.html This product includes code (JaspellTernarySearchTrie) from Java Spelling Checking Package (jaspell): http://jaspell.sourceforge.net/ License: The BSD License (http://www.opensource.org/licenses/bsd-license.php) The snowball stemmers in analysis/common/src/java/net/sf/snowball were developed by Martin Porter and Richard Boulton. The snowball stopword lists in analysis/common/src/resources/org/apache/lucene/analysis/snowball were developed by Martin Porter and Richard Boulton. The full snowball package is available from http://snowball.tartarus.org/ The KStem stemmer in analysis/common/src/org/apache/lucene/analysis/en was developed by Bob Krovetz and Sergio Guzman-Lara (CIIR-UMass Amherst) under the BSD-license. The Arabic,Persian,Romanian,Bulgarian, Hindi and Bengali analyzers (common) come with a default stopword list that is BSD-licensed created by Jacques Savoy. These files reside in: analysis/common/src/resources/org/apache/lucene/analysis/ar/stopwords.txt, analysis/common/src/resources/org/apache/lucene/analysis/fa/stopwords.txt, analysis/common/src/resources/org/apache/lucene/analysis/ro/stopwords.txt, analysis/common/src/resources/org/apache/lucene/analysis/bg/stopwords.txt, analysis/common/src/resources/org/apache/lucene/analysis/hi/stopwords.txt,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		analysis/common/src/resources/org/apache/lucene/analysis/bn/stopwords.txt See http://members.unine.ch/jacques.savoy/clef/index.html. The German,Spanish,Finnish,French,Hungarian,Italian,Portuguese,Russian and Swedish light stemmers (common) are based on BSD-licensed reference implementations created by Jacques Savoy and Ljiljana Dolamic. These files reside in: analysis/common/src/java/org/apache/lucene/analysis/de/GermanLightStemmer.java analysis/common/src/java/org/apache/lucene/analysis/de/GermanMinimalStemmer.java analysis/common/src/java/org/apache/lucene/analysis/es/SpanishLightStemmer.java analysis/common/src/java/org/apache/lucene/analysis/fi/FinnishLightStemmer.java analysis/common/src/java/org/apache/lucene/analysis/fr/FrenchLightStemmer.java analysis/common/src/java/org/apache/lucene/analysis/fr/FrenchMinimalStemmer.java analysis/common/src/java/org/apache/lucene/analysis/hu/HungarianLightStemmer.java analysis/common/src/java/org/apache/lucene/analysis/it/ItalianLightStemmer.java analysis/common/src/java/org/apache/lucene/analysis/pt/PortugueseLightStemmer.java analysis/common/src/java/org/apache/lucene/analysis/ru/RussianLightStemmer.java analysis/common/src/java/org/apache/lucene/analysis/sv/SwedishLightStemmer.java The Stempel analyzer (stempel) includes BSD-licensed software developed by the Egothor project http://egothor.sf.net/, created by Leo Galambos, Martin Kvapil, and Edmond Nolan. The Polish analyzer (stempel) comes with a default stopword list that is BSD-licensed created by the Carrot2 project. The file resides in stempel/src/resources/org/apache/lucene/analysis/pl/stopwords.txt. See http://project.carrot2.org/license.html. The SmartChineseAnalyzer source code (smartcn) was provided by Xiaoping Gao and copyright 2009 by www.imdict.net. WordBreakTestUnicode_*.java (under modules/analysis/common/src/test/) is derived from Unicode data such as the Unicode Character Database. See http://unicode.org/copyright.html for more details.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The Morfologik analyzer (morfologik) includes BSD-licensed software developed by Dawid Weiss and Marcin Miłkowski (http://morfologik.blogspot.com/). Morfologik uses data from Polish ispell/myspell dictionary (http://www.sjp.pl/slownik/en/) licenced on the terms of (inter alia) LGPL and Creative Commons ShareAlike. Morfologic includes data from BSD-licensed dictionary of Polish (SGJP) (http://sgjp.pl/morfeusz/) Servlet-api.jar and javax.servlet-*.jar are under the CDDL license, the original source code for this can be found at http://www.eclipse.org/jetty/downloads.php Kuromoji Japanese Morphological Analyzer - Apache Lucene Integration This software includes a binary and/or source version of data from mecab-ipadic-2.7.0-20070801 which can be obtained from http://atilika.com/releases/mecab-ipadic/mecab-ipadic-2.7.0-20070801.tar.gz or http://jaist.dl.sourceforge.net/project/mecab/mecab-ipadic/2.7.0-20070801/mecab-ipadic-2.7.0-20070801.tar.gz mecab-ipadic-2.7.0-20070801 Notice Nara Institute of Science and Technology (NAIST), the copyright holders, disclaims all warranties with regard to this software, including all implied warranties of merchantability and fitness, in no event shall NAIST be liable for any special, indirect or consequential damages or any damages whatsoever resulting from loss of use, data or profits, whether in an action of contract, negligence or other tortuous action, arising out of or in connection with the use or performance of this software. A large portion of the dictionary entries originate from ICOT Free Software. The following conditions for ICOT Free Software applies to the current dictionary as well. Each User may also freely distribute the Program, whether in its original form or modified, to any third party or parties, PROVIDED that the provisions of Section 3 ("NO WARRANTY") will ALWAYS appear on, or be attached to, the Program, which is distributed substantially in the same form as set out herein and that such intended distribution, if actually made, will neither violate or otherwise contravene any of the laws and regulations of the countries having jurisdiction over the User or the intended distribution itself. NO WARRANTY The program was produced on an experimental basis in the course of the research and development conducted during the project and is provided to users as so

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		produced on an experimental basis. Accordingly, the program is provided without any warranty whatsoever, whether express, implied, statutory or otherwise. The term "warranty" used herein includes, but is not limited to, any warranty of the quality, performance, merchantability and fitness for a particular purpose of the program and the nonexistence of any infringement or violation of any right of any third party. Each user of the program will agree and understand, and be deemed to have agreed and understood, that there is no warranty whatsoever for the program and, accordingly, the entire risk arising from or otherwise connected with the program is assumed by the user. Therefore, neither ICOT, the copyright holder, or any other organization that participated in or was otherwise related to the development of the program and their respective officials, directors, officers and other employees shall be held liable for any and all damages, including, without limitation, general, special, incidental and consequential damages, arising out of or otherwise in connection with the use or inability to use the program or any product, material or result produced or otherwise obtained by using the program, regardless of whether they have been advised of, or otherwise had knowledge of, the possibility of such damages at any time during the project or thereafter. Each user will be deemed to have agreed to the foregoing by his or her commencement of use of the program. The term "use" as used herein includes, but is not limited to, the use, modification, copying and distribution of the program and the production of secondary products from the program. In the case where the program, whether in its original form or modified, was distributed or delivered to or received by a user from any person, organization or entity other than ICOT, unless it makes or grants independently of ICOT any specific warranty to the user in writing, such person, organization or entity, will also be exempted from and not be held liable to the user for any such damages as noted above as far as the program is concerned. Nori Korean Morphological Analyzer - Apache Lucene Integration This software includes a binary and/or source version of data from mecab-ko-dic-2.0.3-20170922 which can be obtained from https://bitbucket.org/eunjeon/mecab-ko-dic/downloads/mecab-ko-dic-2.0.3-20170922.tar.gz ---------- FOURTH-PARTY DEPENDENCY #33 org.checkerframework:checker-qual:2.8.1 FOURTH-PARTY DEPENDENCY #33 Copyright and License Notice Checker Framework qualifiers

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2004-present by the Checker Framework developers MIT License - See Appendix G ---------- FOURTH-PARTY DEPENDENCY #34 org.json:json:20140107 FOURTH-PARTY DEPENDENCY #34 Copyright and License Notice Copyright (c) 2002 JSON.org MIT License See Appendix G ---------- FOURTH-PARTY DEPENDENCY #35 org.jsoup:jsoup:1.12.1 FOURTH-PARTY DEPENDENCY #35 Copyright and License Notice The MIT License - See Appendix G Copyright (c) 2009-2019 Jonathan Hedley <jonathan@hedley.net> MIT License - See Appendix G ---------- FOURTH-PARTY DEPENDENCY #36 org.owasp:dependency-check-core:5.2.4 FOURTH-PARTY DEPENDENCY #37 org.owasp:dependency-check-utils:5.2.4 Common Copyright Notice dependency-check Copyright (c) 2012-2013 Jeremy Long. All Rights Reserved. The licenses for the software listed below can be found in the META-INF/licenses/[dependency name]. This product includes software developed by The Apache Software Foundation (http://www.apache.org/). This product includes software developed by Jquery.com (http://jquery.com/). This product includes software developed by Jonathan Hedley (jsoup.org) This software contains unmodified binary redistributions for H2 database engine (http://www.h2database.com/), which is dual licensed and available under a modified version of the MPL 1.1 (Mozilla Public License) or under the (unmodified) EPL 1.0 (Eclipse Public License). An original copy of the license agreement can be found at: http://www.h2database.com/html/license.html This product includes data from the Common Weakness Enumeration (CWE): http://cwe.mitre.org/ This product downloads and utilizes data from the National Vulnerability Database hosted by NIST: http://nvd.nist.gov/download.cfm

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- FOURTH-PARTY DEPENDENCY #38 org.owasp:dependency-check-gradle:5.2.4 FOURTH-PARTY DEPENDENCY #38 Copyright Notice dependency-check-gradle Copyright (c) 2015 Wei Ma. All Rights Reserved. The licenses for the software listed below can be found in the META-INF/licenses/[dependency name]. This product includes software developed by The Apache Software Foundation (http://www.apache.org/). This product includes data from the Common Weakness Enumeration (CWE): http://cwe.mitre.org/ This product downloads and utilizes data from the National Vulnerability Database hosted by NIST: http://nvd.nist.gov/download.cfm ---------- FOURTH-PARTY DEPENDENCY #39 org.slf4j:jcl-over-slf4j:1.7.26 FOURTH-PARTY DEPENDENCY #40 org.slf4j:slf4j-api:1.7.26 Common Copyright and License MIT License - See Appendix G Copyright (c) 2004-2017 QOS.ch All rights reserved. MIT License - See Appendix G ---------- FOURTH-PARTY DEPENDENCY #41 org.sonatype.goodies:package-url-java:1.0.1 FOURTH-PARTY DEPENDENCY #41 Copyright Notice Copyright (c) 2018-present Sonatype, Inc. All rights reserved. This program is licensed to you under the Apache License Version 2.0, and you may not use this file except in compliance with the Apache License Version 2.0. You may obtain a copy of the Apache License Version 2.0 at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the Apache License Version 2.0 is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the Apache License Version 2.0 for the specific language governing permissions and limitations there under. ---------- FOURTH-PARTY DEPENDENCY #42 org.sonatype.ossindex:ossindex-service-api:1.2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #43 org.sonatype.ossindex:ossindex-service-client:1.2.0 Common Copyright Notice Copyright © 2018–2019 Sonatype, Inc.. All rights reserved. ---------- FOURTH-PARTY DEPENDENCY #44 us.springett:cpe-parser:2.0.1 FOURTH-PARTY DEPENDENCY #44 Copyright Notice This file is part of CPE Parser. This program is licensed to you under the Apache License Version 2.0, and you may not use this file except in compliance with the Apache License Version 2.0. You may obtain a copy of the Apache License Version 2.0 at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the Apache License Version 2.0 is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the Apache License Version 2.0 for the specific language governing permissions and limitations there under. Copyright (c) 2018 Jeremy Long. All Rights Reserved. This file is part of CPE Parser. This program is licensed to you under the Apache License Version 2.0, and you may not use this file except in compliance with the Apache License Version 2.0. You may obtain a copy of the Apache License Version 2.0 at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the Apache License Version 2.0 is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the Apache License Version 2.0 for the specific language governing permissions and limitations there under. Copyright (c) Steve Springett. All Rights Reserved. ---------- FOURTH-PARTY DEPENDENCY #3 com.github.spullara.mustache.java:compiler:0.8.17 FOURTH-PARTY DEPENDENCY #4 com.fasterxml.jackson.core:jackson-annotations:2.10.0 FOURTH-PARTY DEPENDENCY #5 com.google.code.findbugs:jsr305:3.0.2

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #6 com.google.code.gson:gson:2.8.5 FOURTH-PARTY DEPENDENCY #7 com.google.errorprone:error_prone_annotations:2.3.2 FOURTH-PARTY DEPENDENCY #8 com.google.guava:failureaccess:1.0.1 FOURTH-PARTY DEPENDENCY #9 com.google.guava:listenablefuture:9999.0-empty-to-avoid-conflict-with-guava FOURTH-PARTY DEPENDENCY #10 com.google.guava:guava:28.1-jre FOURTH-PARTY DEPENDENCY #11 com.google.j2objc:j2objc-annotations:1.3 FOURTH-PARTY DEPENDENCY #15 commons-collections:commons-collections:3.2.2 FOURTH-PARTY DEPENDENCY #16 commons-io:commons-io:2.6 FOURTH-PARTY DEPENDENCY #17 commons-logging:commons-logging:1.2 FOURTH-PARTY DEPENDENCY #18 com.sun.activation:jakarta.activation:1.2.1 FOURTH-PARTY DEPENDENCY #20 javax.inject:javax.inject:1 FOURTH-PARTY DEPENDENCY #21 javax.ws.rs:javax.ws.rs-api:2.0.1 FOURTH-PARTY DEPENDENCY #22 joda-time:joda-time:2.10.3 FOURTH-PARTY DEPENDENCY #23 org.apache.commons:commons-compress:1.19 FOURTH-PARTY DEPENDENCY #24 org.apache.commons:commons-jcs-core:2.2.1 FOURTH-PARTY DEPENDENCY #25 org.apache.commons:commons-lang3:3.8.1 FOURTH-PARTY DEPENDENCY #26 org.apache.commons:commons-text:1.8 FOURTH-PARTY DEPENDENCY #27 org.apache.commons:commons-lang3:3.8.1 FOURTH-PARTY DEPENDENCY #28 org.apache.lucene:lucene-analyzers-common:8.3.0 FOURTH-PARTY DEPENDENCY #29 org.apache.lucene:lucene-core:8.3.0 FOURTH-PARTY DEPENDENCY #30 org.apache.lucene:lucene-queries:8.3.0 FOURTH-PARTY DEPENDENCY #31 org.apache.lucene:lucene-queryparser:8.3.0 FOURTH-PARTY DEPENDENCY #32 org.apache.lucene:lucene-sandbox:8.3.0 FOURTH-PARTY DEPENDENCY #36 org.owasp:dependency-check-core:5.2.4

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #37 org.owasp:dependency-check-utils:5.2.4 FOURTH-PARTY DEPENDENCY #38 org.owasp:dependency-check-gradle:5.2.4 FOURTH-PARTY DEPENDENCY #41 org.sonatype.goodies:package-url-java:1.0.1 FOURTH-PARTY DEPENDENCY #42 org.sonatype.ossindex:ossindex-service-api:1.2.0 FOURTH-PARTY DEPENDENCY #43 org.sonatype.ossindex:ossindex-service-client:1.2.0 FOURTH-PARTY DEPENDENCY #44 us.springett:cpe-parser:2.0.1 Common License Apache License - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Open Source	pandas 1.3.3	========Third Party Info======== pandas BSD BSD 3-Clause License Copyright (c) 2008-2011, AQR Capital Management, LLC, Lambda Foundry, Inc. and PyData Development Team All rights reserved. Copyright (c) 2011-2020, Open source contributors. See Appendix M ========Fourth Party Info======== --------- ---------- Name six License MIT Copyright Copyright (c) 2010-2020 Benjamin Peterson Copyright (c) 2010-2020 Benjamin Peterson --------- ---------- --------- ---------- Name python-dateutil License BSD 3 Clause Copyright Copyright (c) 2012-2014 - Tomi Pieviläinen Copyright (c) 2015- - Paul Ganssle Copyright (c) 2014-2016 - Yaron de Leeuw Copyright 2017- Paul Ganssle Copyright 2017- dateutil contributors (see AUTHORS file) Copyright (c) 2015- - dateutil contributors (see AUTHORS file) Copyright (c) 2003-2011 - Gustavo Niemeyer Copyright (c) 2012-2014 - Tomi Pieviläinen Copyright (c) 2015- - Paul Ganssle Copyright (c) 2014-2016 - Yaron de Leeuw Copyright 2017- Paul Ganssle Copyright 2017- dateutil contributors (see AUTHORS file) Copyright (c) 2015- - dateutil contributors (see AUTHORS file)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2003-2011 - Gustavo Niemeyer --------- ---------- ========License======== ------- ---------- License MIT Text Copyright (c) 2010-2020 Benjamin Peterson MIT License See Appendix G ------- ---------- ------- ---------- License BSD 3 Clause Text Copyright 2017- Paul Ganssle Copyright 2017- dateutil contributors (see AUTHORS file) Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. The above license applies to all contributions after 2017-12-01, as well as all contributions that have been re-licensed (see AUTHORS file for the list of contributors who have re-licensed their code). ---------- dateutil - Extensions to the standard

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Python datetime module. Copyright (c) 2003-2011 - Gustavo Niemeyer Copyright (c) 2012-2014 - Tomi Pieviläinen Copyright (c) 2014-2016 - Yaron de Leeuw Copyright (c) 2015- - Paul Ganssle Copyright (c) 2015- - dateutil contributors (see AUTHORS file) All rights reserved. See Appendix M The above BSD License Applies to all code, even that also covered by Apache 2.0. ------- ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Open Source	pandas 1.0.4	Website: https://pandas.pydata.org/ License: https://github.com/pandas-dev/pandas/blob/master/LICENSE BSD 3-Clause License Copyright (c) 2008-2011, AQR Capital Management, LLC, Lambda Foundry, Inc. and PyData Development Team All rights reserved. Copyright (c) 2011-2020, Open source contributors. See Appendix M 4p Dependency: python-dateutil Version: 2.8.1 Website: https://github.com/dateutil/dateutil License: https://github.com/dateutil/dateutil/blob/master/LICENSE Copyright 2017- Paul Ganssle Copyright 2017- dateutil contributors (see AUTHORS file) Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. The above license applies to all contributions after 2017-12-01, as well as all contributions that have been re-licensed (see AUTHORS file for the list of contributors who have re-licensed their code). ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		dateutil - Extensions to the standard Python datetime module. Copyright (c) 2003-2011 - Gustavo Niemeyer Copyright (c) 2012-2014 - Tomi Pieviläinen Copyright (c) 2014-2016 - Yaron de Leeuw Copyright (c) 2015- - Paul Ganssle Copyright (c) 2015- - dateutil contributors (see AUTHORS file) All rights reserved. See Appendix M The above BSD License Applies to all code, even that also covered by Apache 2.0. 4p Dependency: pytz Version: 2019.3 Website: https://pythonhosted.org/pytz/ License: https://pythonhosted.org/pytz/#license MIT license. This code is also available as part of Zope 3 under the Zope Public License, Version 2.1 (ZPL). I'm happy to relicense this code if necessary for inclusion in other open source projects. 4p Dependency: numpy Version: 1.18.2 Website: https://numpy.org/ License: https://numpy.org/license.html Copyright © 2005-2020, NumPy Developers. All rights reserved. See Appendix M 4p Dependency: six Version: 1.14.0 Website: https://github.com/benjaminp/six License: https://github.com/benjaminp/six/blob/master/LICENSE Copyright (c) 2010-2020 Benjamin Peterson MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		4p Dependency: haven Version: introduced in commit 5686313 Website: https://haven.tidyverse.org/ License: https://github.com/pandas-dev/pandas/blob/master/LICENSES/HAVEN_LICENSE # MIT License Copyright (c) 2019 Hadley Wickham; RStudio; and Evan Miller MIT License See Appendix G 4p Dependency: musl Version: introduced in commit 8ea7744 Website: https://musl.libc.org/ License: https://github.com/pandas-dev/pandas/blob/master/LICENSES/MUSL_LICENSE musl as a whole is licensed under the following standard MIT license: ---------- Copyright © 2005-2014 Rich Felker, et al. MIT License See Appendix G ---------- Authors/contributors include: Anthony G. Basile Arvid Picciani Bobby Bingham Boris Brezillon Brent Cook Chris Spiegel Clément Vasseur Emil Renner Berthing Hiltjo Posthuma Isaac Dunham Jens Gustedt Jeremy Huntwork John Spencer Justin Cormack Luca Barbato Luka Perkov

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		M Farkas-Dyck (Strake) Michael Forney Nicholas J. Kain orc Pascal Cuoq Pierre Carrier Rich Felker Richard Pennington sin Solar Designer Stefan Kristiansson Szabolcs Nagy Timo Teräs Valentin Ochs William Haddon Portions of this software are derived from third-party works licensed under terms compatible with the above MIT license: The TRE regular expression implementation (src/regex/reg* and src/regex/tre*) is Copyright © 2001-2008 Ville Laurikari and licensed under a 2-clause BSD license (license text in the source files). The included version has been heavily modified by Rich Felker in 2012, in the interests of size, simplicity, and namespace cleanliness. Much of the math library code (src/math/* and src/complex/*) is Copyright © 1993,2004 Sun Microsystems or Copyright © 2003-2011 David Schultz or Copyright © 2003-2009 Steven G. Kargl or Copyright © 2003-2009 Bruce D. Evans or Copyright © 2008 Stephen L. Moshier and labelled as such in comments in the individual source files. All have been licensed under extremely permissive terms. The ARM memcpy code (src/string/armel/memcpy.s) is Copyright © 2008 The Android Open Source Project and is licensed under a two-clause BSD license. It was taken from Bionic libc, used on Android. The implementation of DES for crypt (src/misc/crypt_des.c) is Copyright © 1994 David Burren. It is licensed

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		under a BSD license. The implementation of blowfish crypt (src/misc/crypt_blowfish.c) was originally written by Solar Designer and placed into the public domain. The code also comes with a fallback permissive license for use in jurisdictions that may not recognize the public domain. The smoothsort implementation (src/stdlib/qsort.c) is Copyright © 2011 Valentin Ochs and is licensed under an MIT-style license. The BSD PRNG implementation (src/prng/random.c) and XSI search API (src/search/*.c) functions are Copyright © 2011 Szabolcs Nagy and licensed under following terms: "Permission to use, copy, modify, and/or distribute this code for any purpose with or without fee is hereby granted. There is no warranty." The x86_64 port was written by Nicholas J. Kain. Several files (crt) were released into the public domain; others are licensed under the standard MIT license terms at the top of this file. See individual files for their copyright status. The mips and microblaze ports were originally written by Richard Pennington for use in the ellcc project. The original code was adapted by Rich Felker for build system and code conventions during upstream integration. It is licensed under the standard MIT terms. The powerpc port was also originally written by Richard Pennington, and later supplemented and integrated by John Spencer. It is licensed under the standard MIT terms. All other files which have no copyright comments are original works produced specifically for use as part of this library, written either by Rich Felker, the main author of the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		library, or by one or more contibutors listed above. Details on authorship of individual files can be found in the git version control history of the project. The omission of copyright and license comments in each file is in the interest of source tree size. All public header files (include/* and arch/*/ bits/*) should be treated as Public Domain as they intentionally contain no content which can be covered by copyright. Some source modules may fall in this category as well. If you believe that a file is so trivial that it should be in the Public Domain, please contact the authors and request an explicit statement releasing it from copyright. The following files are trivial, believed not to be copyrightable in the first place, and hereby explicitly released to the Public Domain: All public headers: include/*, arch/*/bits/* Startup files: crt/* 4p Dependency: numpydoc Version: introduced in commit 1751bae Website: https://github.com/numpy/numpydoc License: https://github.com/numpy/numpydoc/ blob/master/LICENSE.txt Copyright (C) 2008 Stefan van der Walt , Pauli Virtanen See Appendix M 4p Dependency: bottleneck Version: introduced in commit 1751bae Website: https://github.com/pydata/bottleneck License: https://bottleneck.readthedocs.io/en/ latest/license.html Copyright (c) 2010-2019 Keith Goodman Copyright (c) 2019 Bottleneck Developers All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		4p Dependency: google-api-python-client Version: introduced in commit f485176 Website: https://github.com/googleapis/google-api-python-client License: https://github.com/pandas-dev/pandas/blob/master/LICENSES/OTHER Copyright (C) 2012 Google Inc. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. 4p Dependency: Pyperclip Version: 1.3 Website: https://github.com/asweigart/pyperclip License: https://github.com/pandas-dev/pandas/blob/master/LICENSES/OTHER Copyright (c) 2010, Albert Sweigart All rights reserved. BSD-style license: See Appendix M 4p Dependency: sas7bdat Version: introduced in commit 23810e5 Website: https://bitbucket.org/jaredhobbs/sas7bdat/src/master/ License: https://github.com/pandas-dev/pandas/blob/master/LICENSES/SAS7BDAT_LICENSE Copyright (c) 2015 Jared Hobbs Permission is hereby granted

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		MIT License See Appendix G 4p Dependency: scipy Version: introduced in commit d2a61c3 Website: https://www.scipy.org/ License: https://github.com/pandas-dev/pandas/blob/master/LICENSES/SCIPY_LICENSE Copyright (c) 2001, 2002 Enthought, Inc. All rights reserved. Copyright (c) 2003-2012 SciPy Developers. All rights reserved. See Appendix M 4p Dependency: ujson Version: introduced in commit 4aff800 Website: https://github.com/ultrajson/ultrajson License: https://github.com/pandas-dev/pandas/blob/master/LICENSES/ULTRAJSON_LICENSE Copyright (c) 2011-2013, ESN Social Software AB and Jonas Tarnstrom All rights reserved. See Appendix M Portions of code from MODP_ASCII - Ascii transformations (upper/lower, etc) https://github.com/client9/stringencoders Copyright (c) 2007 Nick Galbreath -- nickg [at] modp [dot] com. All rights reserved. Numeric decoder derived from from TCL library http://www.opensource.apple.com/source/tcl/tcl-14/tcl/license.terms * Copyright (c) 1988-1993 The Regents of the University of California. * Copyright (c) 1994 Sun Microsystems, Inc. 4p Dependency: xarray Version: introduced in commit eee83e2 Website: https://github.com/pydata/xarray/tree/stable License: https://github.com/pandas-dev/pandas/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		blob/master/LICENSES/XARRAY_LICENSE Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ APACHE 2.0 - See Appendix E END OF TERMS AND CONDITIONS APPENDIX: How to apply the Apache License to your work To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright [yyyy] [name of copyright owner] Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Noah Spurrier	Pexpect 4.8.0	URL for License and Copyright Notice – https://github.com/pexpect/pexpect/blob/4.8.0/LICENSE ISC LICENSE This license is approved by the OSI and FSF as GPL-compatible. http://opensource.org/licenses/isc-license.txt Copyright (c) 2013-2014, Pexpect development team Copyright (c) 2012, Noah Spurrier Permission to use, copy, modify, and/or distribute this software for any purpose with or without fee is hereby granted, provided that the above copyright notice and this permission notice appear in all copies. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE. ********** 4P Dependencies: ********** ptyprocess>=0.5 COPYRIGHT and LICENSE: Ptyprocess is under the ISC license, as code derived from Pexpect. http://opensource.org/licenses/ISC Copyright (c) 2013-2014, Pexpect development team Copyright (c) 2012, Noah Spurrier PERMISSION TO USE, COPY, MODIFY, AND/OR DISTRIBUTE THIS SOFTWARE FOR ANY PURPOSE WITH OR WITHOUT FEE IS HEREBY GRANTED,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		PROVIDED THAT THE ABOVE COPYRIGHT NOTICE AND THIS PERMISSION NOTICE APPEAR IN ALL COPIES. THE SOFTWARE IS PROVIDED "AS IS" AND THE AUTHOR DISCLAIMS ALL WARRANTIES WITH REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
CloudBees, Inc.	Pipeline Plugin 590.v6a_d052e5a_a_b_5	Pipeline plugin, 2.6 ~ The MIT License ~ ~ Copyright (c) 2013-2014, CloudBees, Inc. ~ MIT License See Appendix G ---------- ---------- Pipeline: API (workflow-api) v2.47 MIT License Copyright (c) 2013-2021 CloudBees, Inc. MIT License See Appendix G workflow-job-plugin, 2.42(Pipeline: Job) ~ The MIT License ~ ~ Copyright (c) 2013-2014, CloudBees, Inc. ~ MIT License See Appendix G workflow-basic-steps-plugin 2.24 (Pipeline: Basic Steps) ~ The MIT License ~ ~ Copyright (c) 2013-2014, CloudBees, Inc. ~ MIT License See Appendix G workflow-cps 2.94 (Pipeline: Groovy) ~ The MIT License ~ ~ Copyright (c) 2013-2014, CloudBees, Inc. ~ MIT License See Appendix G workflow-durable-task-step 2.40 (Pipeline: Nodes and Processes) ~ The MIT License ~ ~ Copyright (c) 2013-2014, CloudBees, Inc. ~ MIT License See Appendix G workflow-scm-step 2.13 (Pipeline: SCM Step) * The MIT License * * Copyright 2015 Jesse Glick. * MIT License See Appendix G */

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		workflow-step-api 2.24 (Pipeline: Step API v.2.7) The MIT License ~ ~ Copyright (c) 2013-2014, CloudBees, Inc. ~ MIT License See Appendix G workflow-support 3.8 (Pipeline: Supporting APIs) The MIT License ~ ~ Copyright (c) 2013-2014, CloudBees, Inc. ~ MIT License See Appendix G Pipeline: Stage View v.2.19 ~ The MIT License ~ ~ Copyright (c) 2013-2016, CloudBees, Inc. ~ MIT License See Appendix G Pipeline: Input Step v.2.12 * The MIT License * * Copyright (c) 2017, CloudBees, Inc. * MIT License See Appendix G Pipeline: Shared Groovy Libraries v.2.21 The MIT License ~ ~ Copyright (c) 2013-2014, CloudBees, Inc. ~ MIT License See Appendix G Pipeline: Multibranch v.2.26 The MIT License Copyright 2015, CloudBees, Inc. MIT License See Appendix G Pipeline: Declarative v.1.9.2 The MIT License ~ ~ Copyright (c) 2016, CloudBees, Inc. ~ MIT License See Appendix G Pipeline: Stage Step v.2.5 * The MIT License *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Copyright 2014 Jesse Glick. * MIT License See Appendix G Pipeline: Build Step v.2.15 # The MIT License # # Copyright 2014 Jesse Glick. # MIT License See Appendix G Pipeline: Milestone Step v.1.3.2 * The MIT License * * Copyright (c) 2016, CloudBees, Inc. * MIT License See Appendix G bouncycastle API 2.25 IMPLIED DEPENDENCY ONLY -- No calls to BC api found within code ~ The MIT License ~ ~ Copyright (c) 2016-2021, CloudBees, Inc. ~ MIT License See Appendix G Command Agent Launcher (command-launcher-plugin) v.1.06 * The MIT License * * Copyright (c) 2004-2009, Sun Microsystems, Inc., Kohsuke Kawaguchi, Stephen Connolly * MIT License See Appendix G script-security-plugin v.1.78 * The MIT License * * Copyright 2014 CloudBees, Inc. * MIT License See Appendix G JDK Tool (jdk-tool-plugin) v.1.5 /* * The MIT License * * Copyright (c) 2009-2010, Sun Microsystems, Inc., CloudBees, Inc. * MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Prometheus Authors	Prometheus Go client library 1.12.2	github.com/prometheus/client_golang -------- Copyrights Copyright 2018 The Prometheus Authors Copyright 2012-2015 The Prometheus Authors Copyright 2013-2015 Blake Mizerany, Björn Rabenstein Copyright 2010 The Go Authors Copyright 2013 Matt T. Proud Copyright 2015 The Prometheus Authors Copyright 2017 The Prometheus Authors Copyright 2019 The Prometheus Authors Copyright 2014 The Prometheus Authors Copyright 2021 The Prometheus Authors Copyright 2016 The Prometheus Authors Copyright 2020 The Prometheus Authors Copyright (c) 2013, The Prometheus Authors -------- Notices Prometheus instrumentation library for Go applications Copyright 2012-2015 The Prometheus Authors This product includes software developed at SoundCloud Ltd. (http://soundcloud.com/). The following components are included in this product: perks - a fork of https://github.com/bmizerany/perks https://github.com/beorn7/perks Copyright 2013-2015 Blake Mizerany, Björn Rabenstein See https://github.com/beorn7/perks/blob/master/README.md for license details. Go support for Protocol Buffers - Google's data interchange format http://github.com/golang/protobuf/ Copyright 2010 The Go Authors See source code for license details. Support for streaming Protocol Buffer messages for the Go language (golang). https://github.com/matttproud/golang_protobuf_extensions Copyright 2013 Matt T. Proud Licensed under the Apache License, Version 2.0 -------- License SPDX:Apache-2.0 Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- Dependencies Grouped by License ---------- -------- Dependency github.com/matttproud/golang_protobuf_extensions -------- Copyrights Copyright 2012 Matt T. Proud (matt.proud@gmail.com) Copyright 2013 Matt T. Proud Copyright 2016 Matt T. Proud -------- Notices Copyright 2012 Matt T. Proud (matt.proud@gmail.com) -------- Dependency github.com/modern-go/concurrent -------- Copyrights (no copyright notices found) -------- Dependency github.com/modern-go/reflect2 -------- Copyrights (no copyright notices found) -------- Dependency github.com/prometheus/client_model -------- Copyrights Copyright 2013 Prometheus Team Copyright 2012-2015 The Prometheus Authors -------- Notices Data model artifacts for Prometheus. Copyright 2012-2015 The Prometheus Authors This product includes software developed at SoundCloud Ltd. (http://soundcloud.com/). -------- Dependency github.com/prometheus/common -------- Copyrights Copyright 2018 The Prometheus Authors Copyright 2015 The Prometheus Authors Copyright 2016 The Prometheus Authors Copyright 2021 The Prometheus Authors Copyright 2014 The Prometheus Authors Copyright 2020 The Prometheus Authors Copyright (c) 2011, Open Knowledge Foundation Ltd. Copyright 2013 The Prometheus Authors Copyright 2019 The Prometheus Authors Copyright 2017 The Prometheus Authors -------- Notices

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Common libraries shared by Prometheus Go components. Copyright 2015 The Prometheus Authors This product includes software developed at SoundCloud Ltd. (http://soundcloud.com/). -------- Dependency github.com/prometheus/procfs -------- Copyrights Copyright 2018 The Prometheus Authors Copyright 2014-2015 The Prometheus Authors Copyright 2019 The Prometheus Authors Copyright 2017 The Prometheus Authors Copyright 2020 The Prometheus Authors Copyright 2014 Prometheus Team Copyright 2017 Prometheus Team -------- Notices procfs provides functions to retrieve system, kernel and process metrics from the pseudo-filesystem proc. Copyright 2014-2015 The Prometheus Authors This product includes software developed at SoundCloud Ltd. (http://soundcloud.com/). -------- Dependencies Summary github.com/matttproud/golang_protobuf_extensions github.com/modern-go/concurrent github.com/modern-go/reflect2 github.com/prometheus/client_model github.com/prometheus/common github.com/prometheus/procfs -------- License used by Dependencies SPDX:Apache-2.0 Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Prometheus Authors	Prometheus Java Simpleclient 0.9.0	Prometheus instrumentation library for JVM applications Copyright 2012-2015 The Prometheus Authors This product includes software developed at Boxever Ltd. (http://www.boxever.com/). This product includes software developed at SoundCloud Ltd. (http://soundcloud.com/). This product includes software developed as part of the Ocelli project by Netflix Inc. (https://github.com/Netflix/ocelli/). APACHE 2.0 - See Appendix E ---------- Dependencies Grouped by License ---------- -------- Dependency github.com/golang/protobuf -------- Copyrights Copyright 2010 The Go Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Copyright 2020 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All rights reserved. Copyright 2010 The Go Authors. All rights reserved. Copyright 2014 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. -------- Dependency golang.org/x/sys -------- Copyrights Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. Copyright 2018 The Go Authors. All rights reserved. Copyright 2020 The Go Authors. All rights reserved. Copyright 2012 The Go Authors. All rights reserved. Copyright 2011 The Go Authors. All rights reserved. Copyright 2015 The Go Authors. All rights reserved. Copyright 2009 The Go Authors. All rights reserved. Copyright 2013 The Go Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All rights reserved. Copyright 2010 The Go Authors. All rights reserved. Copyright 2014 The Go Authors. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2021 The Go Authors. All rights reserved. Copyright 2009,2010 The Go Authors. All rights reserved. Copyright 2017 The Go Authors. All right reserved. -------- Patents Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed. -------- Dependency google.golang.org/protobuf -------- Copyrights Copyright (c) 2018 The Go Authors. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2018 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved. Copyright 2020 The Go Authors. All rights reserved. Copyright 2019 The Go Authors. All rights reserved.", Copyright 2018 The Go Authors. All rights reserved.", Copyright 2008 Google Inc. All rights reserved. Copyright 2021 The Go Authors. All rights reserved. -------- Patents Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed. -------- Dependencies Summary

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		github.com/golang/protobuf golang.org/x/sys google.golang.org/protobuf -------- License used by Dependencies SPDX:BSD-3-Clause--modified-by-Google Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. * Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ---------- Dependencies Grouped by License -----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		-------- Dependency github.com/beorn7/perks -------- Copyrights Copyright (C) 2013 Blake Mizerany -------- Dependency github.com/cespare/xxhash/v2 -------- Copyrights Copyright (c) 2016 Caleb Spare -------- Dependency github.com/json-iterator/go -------- Copyrights Copyright (c) 2016 json-iterator -------- Dependencies Summary github.com/beorn7/perks github.com/cespare/xxhash/v2 github.com/json-iterator/go -------- License used by Dependencies SPDX:MIT See Appendix G ---------- - golang.org/x/text ---------- - Copyright (c) 2009 The Go Authors. All rights reserved. Copyright 2016 The Go Authors. All rights reserved. Use of this source code is governed by a BSD-style license that can be found in the LICENSE file. ---------- PATENT ---------- Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed. ---------- LICENSE ---------- See Appendix M

The Prometheus Authors	Prometheus Python Client 0.11.0
	Prometheus Python Client 0.15.0
		`Prometheus instrumentation library for Python applications`
		`Copyright 2015 The Prometheus Authors`
		`This product bundles decorator 4.0.10 which is available under a "2-clause BSD"`
		`license. For details, see prometheus_client/decorator.py.`
		
		APACHE 2.0 - See Appendix E
		
		`###############4th party###########`
		`client_python contains an embedded release of decorator 4.0.10 (https://github.com/micheles/decorator), see decorator.py.`
		`# Copyright (c) 2005-2016, Michele Simionato`
		`# All rights reserved.`
		`#`
		
		See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Holger Krekel, Bruno Oliveira, Ronny Pfannschmidt, Floris Bruynooghe, Brianna Laugher, Florian Bruhin and others None	pytest 6.2.5	Pytest 6.2.5 The MIT License (MIT) Copyright (c) 2004-2020 Holger Krekel and others See Appendix G ********** ********** ********** -------- 4TH PARTY DEPENDENCIES ———— ********** ********** ********** attrs:-21.2.0 The MIT License (MIT) Copyright (c) 2015 Hynek Schlawack See Appendix G ********** ********** ********** iniconfig:-1.1.1 The MIT License (MIT) See Appendix G ********** ********** ********** packaging:-21.0 This software is made available under the terms of *either* of the licenses found in LICENSE.APACHE or LICENSE.BSD. Contributions to this software is made under the terms of *both* these licenses. Content of LICENSE.APACHE:- Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ APACHE 2.0 - See Appendix E ********** ********** ********** pluggy:-1.0.0 The MIT License (MIT) See Appendix G ********** ********** ********** py:-1.10.0 The MIT License (MIT) See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		********** toml:-0.10.2 The MIT License See Appendix G
Python Software Foundation	python-dateutil 2.8.1	********** ********* Copied from LT Public License & Copyright Notices ********* Top Level Component : python-dateutil 2.8.1 Top Level Component License, copyright : Apache Software License, BSD License (Dual License) ========== ========== Copyright 2017- Paul Ganssle Copyright 2017- dateutil contributors (see AUTHORS file) Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. The above license applies to all contributions after 2017-12-01, as well as all contributions that have been re-licensed (see AUTHORS file for the list of contributors who have re-licensed their code). Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION Appendix E. END OF TERMS AND CONDITIONS ---------- ----- dateutil - Extensions to the standard Python datetime module. Copyright (c) 2003-2011 - Gustavo Niemeyer Copyright (c) 2012-2014 - Tomi Pievilainen Copyright (c) 2014-2016 - Yaron de Leeuw Copyright (c) 2015- - Paul Ganssle Copyright (c) 2015- - dateutil contributors (see AUTHORS file) All rights reserved. See Appendix M The above BSD License Applies to all code, even that also covered by Apache 2.0. ========== ========== Fourth Party Dependency #1 Name : six-1.15.0 Fourth Party Dependency #1 License : MIT Fourth Party Dependency #1 Copyright : Copyright (c) 2010-2020 Benjamin Peterson See Appendix G ========== ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Elasticsearch B.V.	Python Elasticsearch Client 7.10.1	elasticsearch 7.10.1 Copyright 2021 Elasticsearch B.V. Licensed under the Apache License, Version 2.0 APACHE 2.0 - See Appendix E -------- 4TH PARTY DEPENDENCIES --------- certifi 2021.5.30 This package contains a modified version of ca-bundle.crt: ca-bundle.crt -- Bundle of CA Root Certificates Certificate data from Mozilla as of: Thu Nov 3 19:04:19 2011# This is a bundle of X.509 certificates of public Certificate Authorities (CA). These were automatically extracted from Mozilla's root certificates file (certdata.txt). This file can be found in the mozilla source tree: http://mxr.mozilla.org/mozilla/source/security/nss/lib/ckfw/builtins/certdata.txt?raw=1# It contains the certificates in PEM format and therefore can be directly used with curl / libcurl / php_curl, or with an Apache+mod_ssl webserver for SSL client authentication. Just configure this file as the SSLCACertificateFile.# ***** BEGIN LICENSE BLOCK ***** This Source Code Form is subject to the terms of the Mozilla Public License, v. 2.0. If a copy of the MPL was not distributed with this file, You can obtain one at http://mozilla.org/MPL/2.0/. ********** Mozilla Public License Version 2.0 - See Appendix S ---------- urllib3 1.26.6 MIT License Copyright (c) 2008-2020 Andrey Petrov and contributors (see CONTRIBUTORS.txt) See Appendix G
Kirill Simonov	pyyaml 6	Copyright (c) 2017-2021 Ingy döt Net Copyright (c) 2006-2016 Kirill Simonov License name: MIT See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
pgjones.dev	Quart 0.18.0	TOP-LEVEL COPYRIGHT NOTICE for Quart -> 0.15.1 RELEASE ---------separator--------- TOP-LEVEL LICENSE TEXT for Quart -> 0.15.1 RELEASE MIT License Copyright P G Jones 2017. See Appendix G ---------separator---------- FOURTH-PARTY DEPENDENCY #1 aiofiles 0.7.0 FOURTH-PARTY DEPENDENCY #1 COPYRIGHT And LICENSE NOTICES APACHE 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #2 blinker: 1.4 FOURTH-PARTY DEPENDENCY #2 COPYRIGHT And LICENSE NOTICES MIT License Copyright (c) The Blinker authors and contributors See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #3 click: 8.0.1 FOURTH-PARTY DEPENDENCY #3 COPYRIGHT And LICENSE NOTICES Copyright 2014 Pallets R See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #4 h11: 0.12.0 FOURTH-PARTY DEPENDENCY #4 COPYRIGHT And LICENSE NOTICES MIT License The MIT License (MIT) Copyright (c) 2016 Nathaniel J. Smith and other contributors See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #5 h2: 4.0.0 FOURTH-PARTY DEPENDENCY #5 COPYRIGHT And LICENSE NOTICES The MIT License (MIT) Copyright (c) 2015-2020 Cory Benfield and contributors See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #6 hypercorn: 0.11.2 FOURTH-PARTY DEPENDENCY #6 COPYRIGHT And LICENSE NOTICES MIT License Copyright P G Jones 2018. See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #7 hyperframe: 6.0.1 FOURTH-PARTY DEPENDENCY #7 COPYRIGHT And LICENSE NOTICES The MIT License (MIT) Copyright (c) 2014 Cory Benfield See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #8 itsdangerous: 2.0.1 FOURTH-PARTY DEPENDENCY #8 COPYRIGHT And LICENSE NOTICES BSD 3-Clause "New" or "Revised" License Copyright 2011 Pallets See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #9 jinja2: 3.0.1 FOURTH-PARTY

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		DEPENDENCY #9 COPYRIGHT And LICENSE NOTICES BSD 3-Clause "New" or "Revised" License Copyright 2007 Pallets See Appendix M . ---------separator--------- FOURTH-PARTY DEPENDENCY #10 MarkupSafe: 2.0.1 FOURTH-PARTY DEPENDENCY #10 COPYRIGHT And LICENSE NOTICES BSD 3-Clause "New" or "Revised" License Copyright 2010 Pallets See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #11 priority: 1.3.0 FOURTH-PARTY DEPENDENCY #11 COPYRIGHT And LICENSE NOTICES MIT License Copyright (c) 2015 Cory Benfield See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #12 toml: 0.10.2 FOURTH-PARTY DEPENDENCY #12 COPYRIGHT And LICENSE NOTICES The MIT License Copyright 2013-2019 William Pearson Copyright 2015-2016 Julien Enselme Copyright 2016 Google Inc. Copyright 2017 Samuel Vasko Copyright 2017 Nate Prewitt Copyright 2017 Jack Evans Copyright 2019 Filippo Broggini See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #13 Werkzeug: 2.0.1 FOURTH-PARTY DEPENDENCY #13 COPYRIGHT And LICENSE NOTICES BSD 3-Clause "New" or "Revised" License Copyright 2007 Pallets See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #14 wsproto: 1.0.0 FOURTH-PARTY DEPENDENCY #14 COPYRIGHT And LICENSE NOTICES The MIT License (MIT) Copyright (c) 2017 Benno Rice and contributors See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	Reactor Core 3.3.7.RELEASE	/* * Copyright (c) 2011-2017 Pivotal Software Inc, All Rights Reserved. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- APACHE 2.0 - See Appendix E --- --- Below are 4th party dependencies. kotlin-stdlib, v1.1.61, apache 2.0, optional dependency ========== ========== == NOTICE file corresponding to the section 4 d of == == the Apache License, Version 2.0, == == in this case for the Kotlin Compiler distribution. == ========== ========== Kotlin Compiler Copyright 2010-2017 JetBrains s.r.o and respective authors and developers ++++++++++ ++++++++++ ++++++++++ reactive-streams, v1.0.2, CC01.0 Creative Commons Legal Code CC0 1.0 Universal CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS DOCUMENT DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER. Statement of Purpose The laws of most jurisdictions throughout the world automatically confer exclusive Copyright and Related Rights (defined below) upon the creator and subsequent owner(s) (each and all, an "owner") of an original work of authorship and/or a database (each, a "Work"). Certain owners wish to permanently relinquish those rights to a Work for the purpose of contributing to a commons of creative, cultural and scientific works ("Commons") that the public can reliably and without fear of later claims of infringement build upon, modify, incorporate in other works, reuse and redistribute as freely as possible in any form whatsoever and for any purposes, including without limitation commercial purposes. These owners may contribute to the Commons to promote the ideal of a free culture and the further production of creative, cultural and scientific works, or to gain reputation or greater distribution for their Work in part through the use and efforts of others. For these and/or other purposes and motivations, and without any expectation of additional consideration or compensation, the person associating CC0 with a Work (the "Affirmer"), to the extent that he or she is an owner of Copyright and Related Rights in the Work, voluntarily elects to apply CC0 to the Work and publicly distribute the Work under its terms, with knowledge of his or her Copyright and Related Rights in the Work and the meaning and intended legal effect of CC0 on those rights. 1. Copyright and Related Rights. A Work made available under CC0 may be protected by copyright and related or neighboring rights ("Copyright and Related Rights"). Copyright and Related Rights include, but are not limited to, the following:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		i. the right to reproduce, adapt, distribute, perform, display, communicate, and translate a Work; ii. moral rights retained by the original author(s) and/or performer(s); iii. publicity and privacy rights pertaining to a person's image or likeness depicted in a Work; iv. rights protecting against unfair competition in regards to a Work, subject to the limitations in paragraph 4(a), below; v. rights protecting the extraction, dissemination, use and reuse of data in a Work; vi. database rights (such as those arising under Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, and under any national implementation thereof, including any amended or successor version of such directive); and vii. other similar, equivalent or corresponding rights throughout the world based on applicable law or treaty, and any national implementations thereof. 2. Waiver. To the greatest extent permitted by, but not in contravention of, applicable law, Affirmer hereby overtly, fully, permanently, irrevocably and unconditionally waives, abandons, and surrenders all of Affirmer's Copyright and Related Rights and associated claims and causes of action, whether now known or unknown (including existing as well as future claims and causes of action), in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "Waiver"). Affirmer makes the Waiver for the benefit of each member of the public at large and to the detriment of Affirmer's heirs and successors, fully intending that such Waiver shall not be subject to revocation, rescission, cancellation, termination, or any other legal or equitable action to disrupt the quiet enjoyment of the Work by the public as contemplated by Affirmer's express Statement of Purpose. 3. Public License Fallback. Should any part of the Waiver for any reason be judged legally invalid or ineffective under

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		applicable law, then the Waiver shall be preserved to the maximum extent permitted taking into account Affirmer's express Statement of Purpose. In addition, to the extent the Waiver is so judged Affirmer hereby grants to each affected person a royalty-free, non transferable, non sublicensable, non exclusive, irrevocable and unconditional license to exercise Affirmer's Copyright and Related Rights in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "License"). The License shall be deemed effective as of the date CC0 was applied by Affirmer to the Work. Should any part of the License for any reason be judged legally invalid or ineffective under applicable law, such partial invalidity or ineffectiveness shall not invalidate the remainder of the License, and in such case Affirmer hereby affirms that he or she will not (i) exercise any of his or her remaining Copyright and Related Rights in the Work or (ii) assert any associated claims and causes of action with respect to the Work, in either case contrary to Affirmer's express Statement of Purpose. 4. Limitations and Disclaimers. a. No trademark or patent rights held by Affirmer are waived, abandoned, surrendered, licensed or otherwise affected by this document. b. Affirmer offers the Work as-is and makes no representations or warranties of any kind concerning the Work, express, implied, statutory or otherwise, including without limitation warranties of title, merchantability, fitness for a particular purpose, non infringement, or the absence of latent or other defects, accuracy, or the present or absence of errors, whether or not discoverable, all to the greatest extent permissible under applicable law. c. Affirmer disclaims responsibility for clearing rights of other persons that may apply to the Work or any use thereof, including without limitation any person's Copyright and Related Rights in the Work.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Further, Affirmer disclaims responsibility for obtaining any necessary consents, permissions or other rights required for any use of the Work. d. Affirmer understands and acknowledges that Creative Commons is not a party to this document and has no duty or obligation with respect to this CC0 or use of the Work. ++++++++++++++++++++ ++ +++++++++++++++ slf4j-api, v1.7.12, MIT license, (optional dependency) Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G ++++++++++++++++ com.google.code.findbugs:jsr305, v3.0.1, New BSD license (optional dependency) The JSR-305 reference implementation (lib/jsr305.jar) is distributed under the terms of the New BSD license: http://www.opensource.org/licenses/bsd-license.php See the JSR-305 home page for more information: http://code.google.com/p/jsr-305/ See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Kenneth Reitz	requests 2.26.0	------------------------------ Top-level license -------------------------- https://raw.githubusercontent.com/psf/requests/v2.24.0/LICENSE URL for License - https://github.com/psf/requests/blob/v2.25.1/LICENSE URL for Copyright Notice - https://github.com/psf/requests/blob/v2.25.1/NOTICE Copyright 2019 Kenneth Reitz Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== APACHE 2.0 - See Appendix E ------------------------------ Copyright notices -------------------------- Copyright 2019 Kenneth Reitz === ========== . . . ---------------------------- Fourth-party information --------------------- === IF YOU ARE INCLUDING FOURTH-PARTY DEPENDENCIES IN THIS LT: === === For each fourth-party component, provide the copyright notices and === license text, clearly identifying to which

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		component they belong. === You must include this for all dependencies, whether they are bundled === or downloaded separately, and whether or not you are using them. === For notices or license text that is shared across multiple components, === you may group the component names together, so that you do not need to === have multiple copies of the same license text, or indicate the license === type if the license text is already provided for another dependency. === For more guidance, see "How do I record fourth-party dependencies?" === in the Corporate Architecture Third Party Approval FAQ. === === If YOU ARE NOT INCLUDING FOURTH-PARTY DEPENDENCIES IN THIS LT, leave === this section blank. However, if you are seeking distribution, YOU MUST === have separate business approvals for each dependency. You may use the === "Fourth-Party Dependencies" section below to identify those other LTs. === ========== ========== == NAME OF DEPENDENCY 1 urllib3 == License Type MIT == Copyright Notices Copyright (c) 2008-2020 Andrey Petrov and contributors (see CONTRIBUTORS.txt) --- (separator)---------- == NAME OF DEPENDENCY 2 certifi == License Type Mozilla == Copyright Notices None --- (separator)---------- == NAME OF DEPENDENCY 3 chardet == License Type LGPL

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		== Copyright Notices Copyright (C) 1991, 1999 Free Software Foundation, Inc. -------------------------------- (separator)---------- == NAME OF DEPENDENCY 4 idna == License Type BSD-like == Copyright Notices Copyright (c) 2013-2020, Kim Davies. All rights reserved.. -------------------------------- (separator)---------- == LICENSES . == Text of license (MIT) MIT License Copyright (c) 2008-2020 Andrey Petrov and contributors (see CONTRIBUTORS.txt) See Appendix G MIT License - See Appendix G GNU General Public License, Version 2 (GPL - 2.1) - See Appendix G == Text of license (BSD-like) Copyright (c) 2013-2020, Kim Davies. All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
scikit-learn developers	scikit-learn 0.23.1	scikit-learn 0.19.0 New BSD License Copyright (c) 2007-2017 The scikit-learn developers. All rights reserved. See Appendix M ********** CBLAS (C interface to Legacy BLAS) http://www.netlib.org/blas/#_licensing Licensing: The reference BLAS is a freely-available software package. It is available from netlib via anonymous ftp and the World Wide Web. Thus, it can be included in commercial software packages (and has been). We only ask that proper credit be given to the authors. Like all software, it is copyrighted. It is not trademarked, but we do ask the following: • If you modify the source for these routines we ask that you change the name of the routine and comment the changes made to the original. • We will gladly answer any questions regarding the software. If a modification is done, however, it is the responsibility of the person who modified the routine to provide support.
Free Software Foundation Inc	Seagull 1.8.1.2.417-0	For GNU General Public License (GPL) Version 2, refer to Appendix A
Selenium	Selenium - Python 4.2.0	APACHE 2.0 - See Appendix E

Daniel Bader	Schedule 1.1.0	`The MIT License (MIT)`
		
		`Copyright (c) 2013 Daniel Bader (http://dbader.org)`
		
		See Appendix G

QOS.ch	SLF4J-1.7.25	Licensed under The MIT License (MIT) and you may not use this file except in compliance with the License. The MIT License (MIT)- See Appendix G This software and sample code developed by QOS.ch and licensed under The MIT License (MIT). For more information on The MIT License (MIT), please see <https://opensource.org/licenses/MIT>

QOS.ch	slf4j-api 1.7.32	`Copyright (c) 2004-2017 QOS.ch`
		`All rights reserved.`
		
		See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
QOS.ch	Simple Logging Facade for Java (SLF4J) 1.7.30	org.slf4j:slf4j-parent -------- Copyrights Copyright (c) 2004-2017 QOS.ch * Copyright (c) 2004-2011 QOS.ch * Copyright (c) 2004-2016 QOS.ch * Copyright 2001-2004 The Apache Software Foundation. * Copyright (C) 1999-2006, QOS.ch * Copyright (c) 2004-2005 QOS.ch Copyright (c) 2004-2013 QOS.ch * Copyright (c) 2004-2013 QOS.ch Copyright (c) 2004-2007 QOS.ch * Copyright (c) 2004-2013 QOS.ch, Copyright (C) 2015 Google Inc. * Copyright (c) 2004-2012 QOS.ch Copyright (c) 2004-2011 QOS.ch SPDX:MIT The MIT License (MIT)- See Appendix G
Pivotal Software, Inc	Spring Boot 2.1.2	Copyright 2012-2018 the original author or authors. APACHE 2.0 - See Appendix E
Pivotal Software, Inc	Spring Boot 2.2.4.RELEASE	APACHE 2.0 - See Appendix E spring-core 5.2.3 Copyright 2002-2019 the original author or authors. APACHE 2.0 - See Appendix E spring-context 5.2.3 Copyright 2002-2019 the original author or authors. APACHE 2.0 - See Appendix E
Pivotal Software, Inc	Spring Boot 2.3.4.RELEASE	Dependency: org.springframework.boot:spring-boot:jar:2.3.4.RELEASE License: Apache 2.0 See Appendix E 2012-2020 the original author or authors. ---------- 4P Dependencies ---------- Dependency: org.springframework:spring-core:jar:5.2.9.RELEASE License: Apache 2.0 See Appendix E 2012-2020 the original author or authors. Dependency: org.springframework:spring-context:jar:5.2.9.RELEASE License: Apache 2.0 See Appendix E 2012-2020 the original author or authors.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	Spring Boot 2.3.1	Spring Boot 2.3.1.RELEASE Notice File for all: Spring Framework 2.3.1 Copyright (c) 2002-2020 Pivotal, Inc. Copies of this document may be made for your own use and for distribution to others, provided that you do not charge any fee for such copies and further provided that each copy contains this Copyright Notice, whether distributed in print or electronically. ---------- Copyright notice for Apache 2.0 is stated under Section 4 of the License below ---------- This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. APACHE 2.0 - See Appendix E >>

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		springframework.data:spring-data-jpa 2.3.1 springframework.boot:spring-boot-starter-json 2.3.1 springframework.boot:spring-boot-starter-tomcat 2.3.1 springframework:spring-web 5.2.7 springframework:spring-beans 5.2.7 springframework:spring-context 5.2.7 springframework.security:spring-security-core 5.3.3 springframework.security:spring-security-config 5.3.3 springframework.security:spring-security-web 5.3.3 commons-codec:commons-codec 1.14 org.apache.logging.log4j:log4j-to-slf4j:2.12.1 Apache Log4j Copyright 1999-2017 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma >>

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* This program and the accompanying materials are dual-licensed under * either the terms of the Eclipse Public License v1.0 as published by * the Eclipse Foundation * * or (per the licensee's choosing) * * under the terms of the GNU Lesser General Public License version 2.1 * as published by the Free Software Foundation. */ EPL Version 1.0 - See Appendix J >>

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. >>>>>>>>>>>>>>>>>>>>>>>>>>> - org.projectlombok:lombok 1.18.12 MIT Copyright (C) 2009-2015 The Project Lombok Authors. See Appendix G >> - jakarta.transaction:jakarta.transaction-api 1.3.3 (EPL 2.0) - jakarta.persistence:jakarta.persistence-api 2.2.3 (EDL 1.0 EPL 2.0) - glassfish:jakarta.el 3.0.3 (EPL 2.0) Eclipse Public License - v 2.0 - See Appendix Y EPL Version 1.0 - See Appendix J >>>>>>>>>>>>>>>>>>

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	Spring Boot 2.5.5	---TOP LEVEL DEPENDENCIES --------- org.springframework.boot:spring-boot-starter-actuator:2.5.5 org.springframework.boot:spring-boot-starter-validation:2.5.5 org.springframework.boot:spring-boot-starter-log4j2:2.5.5 org.springframework.boot:spring-boot-starter-web:2.5.5 org.springframework.boot:spring-boot-starter-cache:2.5.5 org.springframework.boot:spring-boot-starter-data-jpa:2.5.5 org.springframework.boot:spring-boot-starter-webflux:2.5.5 org.springframework.boot:spring-boot-starter-undertow:2.5.5 License: Apache License Version 2.0 License: [0] Copyright: [1] ------------------------------ Top-level license ------------------------- ================ Start of Reference [0] ================ Top Level Component Copyright: === /* * Copyright 2012-2020 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ == == APACHE 2.0 - See Appendix E ------------------------------ TOP LEVEL Copyright notices ------------------------- ================ Start of Reference [1] ================ /* * Copyright 2012-2021 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ================ End of Reference [1] ================ ---------- NOTICE ---------- Spring Boot 2.5.5 Copyright (c) 2012-2021 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ---------- Fourth-party information spring-boot-starter-actuator:2.5.5 ---------- Fourth party Dependencies of - org.springframework.boot:spring-boot-starter-actuator:2.5.5 ---------- (separator)---------- NAME OF DEPENDENCY 1 - org.springframework.boot:spring-boot-starter:2.5.5 NAME OF DEPENDENCY 2 - org.springframework.boot:spring-boot:2.5.5 NAME OF DEPENDENCY 3 - org.springframework:spring-core:5.3.10 NAME OF DEPENDENCY 4 - org.springframework:spring-jcl:5.3.10 NAME OF DEPENDENCY 5 - org.springframework:spring-context:jar:5.3.10 NAME OF DEPENDENCY 6 - org.springframework:spring-aop:jar:5.3.10 NAME OF DEPENDENCY 7 - org.springframework:spring-beans:jar:5.3.10 NAME OF DEPENDENCY 8 - org.springframework:spring-expression:jar:5.3.10 NAME OF DEPENDENCY 9 - org.springframework.boot:spring-boot-autoconfigure:2.5.5 NAME OF DEPENDENCY 10 - org.springframework.boot:spring-boot-actuator-autoconfigure:2.5.5 NAME OF DEPENDENCY 11 - org.springframework.boot:spring-boot-actuator:2.5.5 License: Apache License Version 2.0 (https://www.apache.org/licenses/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		LICENSE-2.0) Text of License: [0] Copyright: [1] -------------------------------- (separator)-------------------------------- NAME OF DEPENDENCY - jakarta.annotation:jakarta.annotation-api:1.3.5 License: Eclipse Public License Version 2.0 + GPL2 w/ CPE License: [2] Copyright: ========== ========== Text of Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ========== ========== -------------------------------- (separator)-------------------------------- NAME OF DEPENDENCY - org.yaml:snakeyaml:1.28 License: Apache License Version 2.0 (https://www.apache.org/licenses/ LICENSE-2.0) Text of License: [0] Copyright: ========== ========== Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== -------------------------------- (separator)-------------------------------- NAME OF DEPENDENCY - io.micrometer:micrometer- core:jar:1.7.4 License: Apache License Version 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Text of License: [0] Copyright: ========== ========== Micrometer Copyright (c) 2017-Present VMware, Inc. All Rights Reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.hdrhistogram:HdrHistogram:jar:2.1.12 License: BSD License Text of License: ========== Start of Reference BSD License ========== Copyright (c) 2012, 2013, 2014, 2015, 2016 Gil Tene Copyright (c) 2014 Michael Barker Copyright (c) 2014 Matt Warren All rights reserved. See Appendix M ========== End of Reference ========== Copyright: ========== ========== Copyright (c) 2012, 2013, 2014, 2015, 2016 Gil Tene Copyright (c) 2014 Michael Barker Copyright (c) 2014 Matt Warren All rights reserved. ========== ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- (separator)---------- NAME OF DEPENDENCY - org.latencyutils:LatencyUtils:jar:2.0.3 License: BSD License Text of License: ----------Start of Reference BSD License---------- Copyright (c) 2012, 2013, 2014 Gil Tene All rights reserved. See Appendix M ----------End of Reference BSD License---------- Copyright: ========== Copyright (c) 2012, 2013, 2014 Gil Tene All rights reserved. ========== ----------END of Fourth-party information spring-boot-starter-actuator:2.5.5 ---------- --------- Start Fourth-party information spring-boot-starter-validation:2.5.5 ---------- Fourth party Dependencies of - org.springframework.boot:spring-boot-starter-validation:2.5.5 ---------- (separator)---------- NAME OF DEPENDENCY - org.apache.tomcat.embed:tomcat-embed-el:9.0.53 License: Apache License Version 2.0 Text of License: [0] Copyright: ========== /* * JBoss, Home of Professional Open Source. * Copyright 2014 Red Hat, Inc., and individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* http://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== ---------- ---------- (separator)---------- NAME OF DEPENDENCY - org.hibernate.validator:hibernate-validator:6.2.0.Final License: Apache License Version 2.0 Text of License: [0] Copyright: ========== ========== /* * Hibernate Validator, declare and validate application constraints * * License: Apache License, Version 2.0 * See the license.txt file in the root directory or . */ ========== ========== ---------- ---------- (separator)---------- NAME OF DEPENDENCY - jakarta.validation:jakarta.validation-api:2.0.2 License: Apache License Version 2.0 Text of License: [0] Copyright:[1] ---------- ---------- (separator)---------- NAME OF DEPENDENCY - org.jboss.logging:jboss-logging:3.4.1.Final License: Apache License Version 2.0 Text of License: [0] Copyright: ========== ========== /* * JBoss, Home of Professional Open Source. * Copyright 2014 Red Hat, Inc., and

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== ----------
		(separator)---------- NAME OF DEPENDENCY - com.fasterxml:classmate:jar:1.5.1 License: Apache License Version 2.0 License: [0] Copyright: ========== ========== Java ClassMate library was originally written by Tatu Saloranta (tatu.saloranta@iki.fi) Other developers who have contributed code are: * Brian Langel ========== ========== ----------END of Fourth-party information spring-boot-starter-validation:2.5.5 ----------
		--------- Start Fourth-party information - spring-boot-starter-log4j2 ---------- Fourth party Dependencies of - org.springframework.boot:spring-boot-starter-log4j2 -> 2.5.5 NOTICE file ---------- ---------- Apache Log4j Copyright 1999-2019 Apache Software Foundation This product includes software developed at

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma ---------- ---------- ---------- (separator)---------- NAME OF DEPENDENCY - log4j-slf4j-impl:2.14.1 License: Apache License, Version 2.0 Text of License: [0] Copyright: ========== ========== /* * Licensed to the Apache Software Foundation (ASF) under one or more * contributor license agreements. See the NOTICE file distributed with * this work for additional information regarding copyright ownership. * The ASF licenses this file to You under the Apache license, Version 2.0 * (the "License"); you may not use this file except in compliance with * the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the license for the specific language governing permissions and * limitations under the license. */ /** * SLF4J support. Note that this does indeed share the same package namespace as the one found in log4j-to-slf4j; * this is intentional. The two JARs should not be used at the same time! Thus, in an OSGi

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		environment * where split packages are not allowed, this error is prevented due to both JARs sharing an exported package name. */ ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.slf4j:slf4j-api License: MIT License Text of License: [23] Copyright: ========== Copyright (c) 2004-2017 QOS.ch ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.apache.logging.log4j:log4j-api:2.14.1 License: Apache License, Version 2.0 Text of License: [0] Copyright: ========== Apache Log4j API Copyright 1999-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.apache.logging.log4j:log4j-core:2.14.1 License: Apache License, Version 2.0 Text of License: [0] Copyright: ========== /Apache Log4j Core Copyright 1999-2019 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell ========== ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(separator)---------- NAME OF DEPENDENCY - org.apache.logging.log4j:log4j-jul:2.14.1 License: Apache License, Version 2.0 Text of License: [0] Copyright: ========== ========== /* * Licensed to the Apache Software Foundation (ASF) under one or more * contributor license agreements. See the NOTICE file distributed with * this work for additional information regarding copyright ownership. * The ASF licenses this file to You under the Apache license, Version 2.0 * (the "License"); you may not use this file except in compliance with * the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the license for the specific language governing permissions and * limitations under the license. */ ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.slf4j:jul-to- slf4j:jar:1.7.32 License: MIT License Text of License: [23] Copyright: ========== ========== Copyright (c) 2004-2017 QOS.ch ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.slf4j:slf4j- api:jar:1.7.32 License: MIT License

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Text of License: [23] Copyright: ========== ========== Copyright (c) 2004-2017 QOS.ch ========== ========== ----------END of Fourth-party information - spring-boot-starter-log4j2 ---------- --------- Start Fourth-party information - spring-boot-starter-web ---------- Fourth party Dependencies of - org.springframework.boot:spring-boot-starter-web ---------- (separator)---------- NAME OF DEPENDENCY - spring-boot-starter-json NAME OF DEPENDENCY - spring-web NAME OF DEPENDENCY - spring-webmvc License: Apache License Version 2.0 License: [0] Copyright: ========== ========== /* * Copyright 2012-2021 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== --------- End Fourth-party information - spring-boot-starter-web ---------- --------- Start Fourth-party information - spring-boot-starter-cache ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Fourth party Dependencies of - spring-boot-starter-cache --- (separator)--- NAME OF DEPENDENCY - org.springframework:spring-context-support License: Apache License Version 2.0 License: [0] Copyright: ========== /* * Copyright 2002-2018 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== --- End Fourth-party information - spring-boot-starter-cache --- --- Start Fourth-party information - spring-boot-starter-data-jpa:2.5.5 --- Fourth party Dependencies of - org.springframework.boot:spring-boot-starter-data-jpa:2.5.5 --- (separator)--- NAME OF DEPENDENCY 1 - spring-boot-starter-aop NAME OF DEPENDENCY 2 - spring-boot-starter-jdbc License: Apache License Version 2.0 Text of License: [0] Copyright: [1] --- (separator)---

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		NAME OF DEPENDENCY - org.aspectj:aspectjweaver License: Eclipse Public License Version 1.0 Text of License: [6] Copyright: ========== ========== * Copyright (c) 2005 Contributors. * All rights reserved. * This program and the accompanying materials are made available * under the terms of the Eclipse Public License v1.0 * which accompanies this distribution and is available at * http://eclipse.org/legal/epl-v10.html ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - com.zaxxer:HikariCP License: Apache License Version 2.0 Text of License: [0] Copyright: ========== ========== Copyright (C) 2013,2014 Brett Wooldridge ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.springframework:spring-tx License: Apache License Version 2.0 Text of License: [0] Copyright: ========== ========== /* * Copyright 2002-2012 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - jakarta.transaction:jakarta.transaction-api License: Eclipse Public License Version 2.0 + GPL2 w/ CPE Text of License: [2] Copyright: ========== ========== All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - jakarta.persistence:jakarta.persistence-api License: Eclipse Public License Version 2.0 Text of License: [21] Copyright: ========== ========== All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.hibernate:hibernate-core:5.4.32.Final License: LGPL 2.1 Text of License: [62] Copyright: ========== ========== GNU Lesser General Public License Version 2.1, February 1999 Copyright (C) 1991, 1999 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Everyone is permitted to copy and distribute verbatim

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		copies of this license document, but changing it is not allowed. [This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.] ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.javassist:javassist License: MPL 1.1 or LGPL2.1 or APL 2.0 ---------- Oracle elects Apache license 2.0 ---------- Text of License: [46] Copyright: ========== /* * Javassist, a Java-bytecode translator toolkit. * Copyright (C) 1999- Shigeru Chiba. All Rights Reserved. * * The contents of this file are subject to the Mozilla Public License Version * 1.1 (the "License"); you may not use this file except in compliance with * the License. Alternatively, the contents of this file may be used under * the terms of the GNU Lesser General Public License Version 2.1 or later, * or the Apache License Version 2.0. * * Software distributed under the License is distributed on an "AS IS" basis, * WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License * for the specific language governing rights and limitations under the * License. */ ========== ---------- (separator)---------- NAME OF DEPENDENCY - net.bytebuddy:byte-buddy License: Apache License Version 2.0 Text of License: [0] Copyright: ========== /*

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Copyright 2014 - Present Rafael Winterhalter * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== ----------
		(separator)---------- NAME OF DEPENDENCY - antlr:antlr:jar:2.7.7 License: ANTLR 2 License License: [31] Copyright: ========== ========== ANTLR 1989-2006 Developed by Terence Parr Partially supported by University of San Francisco &?jGuru.com We reserve no legal rights to the ANTLR--it is fully in the public domain. An individual or company may do whatever they wish with source code distributed with ANTLR or the code generated by ANTLR, including the incorporation of ANTLR, or its output, into commerical software. ========== ========== ----------
		(separator)---------- NAME OF DEPENDENCY - org.jboss:jandex:2.2.3.Final License: Apache License Version 2.0 Text of License: [0] Copyright: ========== ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		/* * JBoss, Home of Professional Open Source. * Copyright 2013 Red Hat, Inc., and individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.dom4j:dom4j License: BSD License Text of License: [41] Copyright: ========== Copyright 2001-2016 (C) MetaStuff, Ltd. and DOM4J contributors. All Rights Reserved. ========== ---------- (separator)---------- NAME OF DEPENDENCY - hibernate-commons-annotations License: LGPLv2.1 Text of License: [62] Copyright: ========== /* * Hibernate, Relational Persistence for Idiomatic Java * * License: GNU Lesser General Public License (LGPL), version 2.1 or later.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* See the lgpl.txt file in the root directory or . */ ========== ---------- (separator)---------- NAME OF DEPENDENCY - spring-data-jpa License: Apache License Version 2.0 + EPL and/or other similar licenses Text of License: [2] Copyright: ========== Spring Data JPA 2.5.5 Copyright (c) [2011-2019] Pivotal Software, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for the these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the LICENSE file. ========== ---------- (separator)---------- NAME OF DEPENDENCY - spring-data-commons License: Apache License Version 2.0 + EPL and/or other similar licenses Text of License: [2] Copyright: ========== Spring Data JPA 2.5.5 (2020.0.8) Copyright (c) [2011-2019] Pivotal Software, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for the these subcomponents is subject to the terms and conditions of the subcomponent's license, as

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		noted in the LICENSE file. ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - org.springframework:spring-jdbc NAME OF DEPENDENCY - org.springframework:spring-aspects License: Apache License Version 2.0 Text of License: [0] Copyright: [1] ----------END of Fourth-party information spring-boot-starter-data-jpa ---------- --------- Start Fourth-party information - spring-boot-starter-webflux ---------- Fourth party Dependencies of - spring-boot- starter-webflux ---------- (separator)---------- NAME OF DEPENDENCY - jackson-datatype-jdk8 License: Apache License Version 2.0 Text of License: [0] Copyright: ========== ========== Copyright 2013 FasterXML.com Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the license for the specific language governing permissions and limitations under the license. ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - jackson-datatype-jsr310 License: Apache License Version 2.0 Text of License: [0] Copyright: ========== ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2013 FasterXML.com Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the license for the specific language governing permissions and limitations under the license. ========== ---------- (separator)---------- NAME OF DEPENDENCY - com.fasterxml.jackson:jackson-bom License: Apache License Version 2.0 Text of License: [0] Copyright: ========== Copyright 2013 FasterXML.com Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the license for the specific language governing permissions and limitations under the license. ========== ---------- (separator)---------- NAME OF DEPENDENCY - jackson-module-parameter-names License: Apache License Version 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Text of License: [0] Copyright: ========== ========== Copyright 2013 FasterXML.com Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the license for the specific language governing permissions and limitations under the license. ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY 1 - spring-boot-starter- reactor-netty:2.5.5 NAME OF DEPENDENCY 2 - reactor-netty-http NAME OF DEPENDENCY 3 - netty-codec NAME OF DEPENDENCY 4 - netty-common NAME OF DEPENDENCY 5 - netty-buffer NAME OF DEPENDENCY 6 - netty-transport NAME OF DEPENDENCY 7 - netty-resolver NAME OF DEPENDENCY 8 - netty-handler NAME OF DEPENDENCY 9 - netty-codec-http2 NAME OF DEPENDENCY 10 - netty-codec-http NAME OF DEPENDENCY 11 - netty-resolver-dns NAME OF DEPENDENCY 12 - netty-codec-dns NAME OF DEPENDENCY 13 - netty-resolver-dns- native-macos NAME OF DEPENDENCY 14 - netty-transport-native- unix-common NAME OF DEPENDENCY 15 - netty-transport-native- epoll NAME OF DEPENDENCY 16 - reactor-netty-core NAME OF DEPENDENCY 17 - netty-handler-proxy NAME OF DEPENDENCY 18 - netty-codec-socks NAME OF DEPENDENCY 19 - reactor-core License: Apache License Version 2.0 Text of License: [2] Copyright: ========== ========== The Netty Project ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

		Please visit the Netty web site for more information:
		  * https://netty.io/
		Copyright 2015 The Netty Project
		The Netty Project licenses this file to you under the Apache License,
		version 2.0 (the "License"); you may not use this file except in compliance
		with the License. You may obtain a copy of the License at:
		  https://www.apache.org/licenses/LICENSE-2.0
		Unless required by applicable law or agreed to in writing, software
		distributed under the License is distributed on an "AS IS" BASIS, WITHOUT
		WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the
		License for the specific language governing permissions and limitations
		under the License.
		==========
		==========
		---------- 	
		(separator)----------
		NAME OF DEPENDENCY - spring-webflux
		License: Apache License Version 2.0
		(https://www.apache.org/licenses/LICENSE-2.0)
		Text of License: [0]
		Copyright: [1]
		----------END of Fourth-party information spring-boot-starter-webflux
		---------- 	
		--------- Start Fourth-party information - spring-boot-starter-undertow
		---------- 	
		Fourth party Dependencies of - spring-boot-starter-undertow
		---------- 	
		(separator)----------
		NAME OF DEPENDENCY - undertow-core
		NAME OF DEPENDENCY - undertow-core
		NAME OF DEPENDENCY - undertow-servlet
		NAME OF DEPENDENCY - undertow-websockets-jsr
		NAME OF DEPENDENCY - xnio-api
		NAME OF DEPENDENCY - jboss-threads
		NAME OF DEPENDENCY - jboss-logging
		License: Apache License Version 2.0
		Text of License: [0]
		Copyright:
		==========
		==========
		/*
		 * JBoss, Home of Professional Open Source.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Copyright 2014 Red Hat, Inc., and individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== ---------- (separator)---------- NAME OF DEPENDENCY - jakarta.servlet:jakarta.servlet-api License: Eclipse Public License - v2.0 Text of License: [21] Copyright: ========== ========== /* * Copyright (c) 2017, 2018 Oracle and/or its affiliates and others. * All rights reserved. * * This program and the accompanying materials are made available under the * terms of the Eclipse Public License v. 2.0, which is available at * http://www.eclipse.org/legal/epl-2.0. * * This Source Code may also be made available under the following Secondary * Licenses when the conditions for such availability set forth in the * Eclipse Public License v. 2.0 are satisfied: GNU General Public License, * version 2 with the GNU Classpath Exception, which is available at * https://www.gnu.org/software/classpath/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		license.html. * * SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 */ ========== ---------- (separator)---------- NAME OF DEPENDENCY 1 - wildfly-common NAME OF DEPENDENCY 2 - wildfly-client-config License: Apache License Version 2.0 Text of License: [0] Copyright: ========== /* * JBoss, Home of Professional Open Source. * Copyright 2016 Red Hat, Inc., and individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ----------END of Fourth-party information---------- ========== ---------- All the license are copied here ---------- ========== Start of Reference [2] ========== Eclipse Public License - v 2.0 - See Appendix Y

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- ## The GNU General Public License (GPL) Version 2, June 1991 Copyright (C) 1989, 1991 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor Boston, MA 02110-1335 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed. Preamble The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too. When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things. To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it. For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		or can get the source code. And you must show them these terms so they know their rights. We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software. Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations. Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all. The precise terms and conditions for copying, distribution and modification follow. TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION 0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you". Activities other than copying, distribution and modification are not

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does. 1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program. You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee. 2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions: a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change. b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License. c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.) These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it. Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program. In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License. 3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following: a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or, b) Accompany it with a written offer,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or, c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.) The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable. If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code. 4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance. 5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it. 6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License. 7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		could satisfy both it and this License would be to refrain entirely from distribution of the Program. If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances. It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice. This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License. 8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License. 9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. Each version is given a distinguishing

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation. 10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally. NO WARRANTY 11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. 12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. END OF TERMS AND CONDITIONS How to Apply These Terms to Your New Programs If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms. To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found. One line to give the program's name and a brief idea of what it does. Copyright (C) This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details. You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1335 USA Also add information on how to contact you by electronic and paper mail. If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details. The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker. signature of Ty Coon, 1 April 1989 Ty Coon, President of Vice This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License. --- ## CLASSPATH EXCEPTION Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License version 2 cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version. ================ End of Reference [2] ================ ================ Start of Reference [23] MIT License ================ Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G ================ End of Reference [23] ================ ================ Start of Reference [6] ================ Eclipse Public License - v 1.0 - See Appendix J LGPL 2.1 - See Appendix T ================ END of Reference [62] ================ ================ Start of Reference [46] ================ MOZILLA PUBLIC LICENSE Version 1.1 1. Definitions. 1.0.1. "Commercial Use" means distribution or otherwise making the Covered Code available to a third party. 1.1. ''Contributor'' means each entity that creates or contributes to the creation of Modifications. 1.2. ''Contributor Version'' means the combination of the Original Code, prior Modifications used by a Contributor, and the Modifications made by that particular Contributor. 1.3. ''Covered Code'' means the Original Code or Modifications or the combination of the Original Code and Modifications, in each case including portions thereof. 1.4. ''Electronic Distribution Mechanism'' means a mechanism generally accepted in the software development community for the electronic transfer of data. 1.5.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		''Executable'' means Covered Code in any form other than Source Code. 1.6. ''Initial Developer'' means the individual or entity identified as the Initial Developer in the Source Code notice required by Exhibit A. 1.7. ''Larger Work'' means a work which combines Covered Code or portions thereof with code not governed by the terms of this License. 1.8. ''License'' means this document. 1.8.1. "Licensable" means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein. 1.9. ''Modifications'' means any addition to or deletion from the substance or structure of either the Original Code or any previous Modifications. When Covered Code is released as a series of files, a Modification is: A. Any addition to or deletion from the contents of a file containing Original Code or previous Modifications. B. Any new file that contains any part of the Original Code or previous Modifications. 1.10. ''Original Code'' means Source Code of computer software code which is described in the Source Code notice required by Exhibit A as Original Code, and which, at the time of its release under this License is not already Covered Code governed by this License. 1.10.1. "Patent Claims" means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor. 1.11. ''Source Code'' means the preferred form of the Covered Code for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an Executable, or source code differential comparisons against either the Original Code or another well known, available Covered Code of the Contributor's choice. The Source Code can be in a compressed or archival form, provided the appropriate decompression or de-archiving software is widely available for no charge. 1.12. "You'' (or "Your") means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License or a future version of this License issued under Section 6.1. For legal entities, "You'' includes any entity which controls, is controlled by, or is under common control with You. For purposes of this

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		definition, "control'' means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity. 2. Source Code License. 2.1. The Initial Developer Grant. The Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license, subject to third party intellectual property claims: (a) under intellectual property rights (other than patent or trademark) Licensable by Initial Developer to use, reproduce, modify, display, perform, sublicense and distribute the Original Code (or portions thereof) with or without Modifications, and/or as part of a Larger Work; and (b) under Patents Claims infringed by the making, using or selling of Original Code, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Code (or portions thereof). (c) the licenses granted in this Section 2.1(a) and (b) are effective on the date Initial Developer first distributes Original Code under the terms of this License. (d) Notwithstanding Section 2.1(b) above, no patent license is granted: 1) for code that You delete from the Original Code; 2) separate from the Original Code; or 3) for infringements caused by: i) the modification of the Original Code or ii) the combination of the Original Code with other software or devices. 2.2. Contributor Grant. Subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license (a) under intellectual property rights (other than patent or trademark) Licensable by Contributor, to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof) either on an unmodified basis, with other Modifications, as Covered Code and/or as part of a Larger Work; and (b) under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: 1) Modifications made by that Contributor (or portions thereof); and 2) the combination

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		of Modifications made by that Contributor with its Contributor Version (or portions of such combination). (c) the licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first makes Commercial Use of the Covered Code. (d) Notwithstanding Section 2.2(b) above, no patent license is granted: 1) for any code that Contributor has deleted from the Contributor Version; 2) separate from the Contributor Version; 3) for infringements caused by: i) third party modifications of Contributor Version or ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or 4) under Patent Claims infringed by Covered Code in the absence of Modifications made by that Contributor. 3. Distribution Obligations. 3.1. Application of License. The Modifications which You create or to which You contribute are governed by the terms of this License, including without limitation Section 2.2. The Source Code version of Covered Code may be distributed only under the terms of this License or a future version of this License released under Section 6.1, and You must include a copy of this License with every copy of the Source Code You distribute. You may not offer or impose any terms on any Source Code version that alters or restricts the applicable version of this License or the recipients' rights hereunder. However, You may include an additional document offering the additional rights described in Section 3.5. 3.2. Availability of Source Code. Any Modification which You create or to which You contribute must be made available in Source Code form under the terms of this License either on the same media as an Executable version or via an accepted Electronic Distribution Mechanism to anyone to whom you made an Executable version available; and if made available via Electronic Distribution Mechanism, must remain available for at least twelve (12) months after the date it initially became available, or at least six (6) months after a subsequent version of that particular Modification has been made available to such recipients. You are responsible for ensuring that the Source Code version remains available even if the Electronic Distribution Mechanism is maintained by a third party. 3.3. Description of Modifications. You must cause

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		all Covered Code to which You contribute to contain a file documenting the changes You made to create that Covered Code and the date of any change. You must include a prominent statement that the Modification is derived, directly or indirectly, from Original Code provided by the Initial Developer and including the name of the Initial Developer in (a) the Source Code, and (b) in any notice in an Executable version or related documentation in which You describe the origin or ownership of the Covered Code. 3.4. Intellectual Property Matters (a) Third Party Claims. If Contributor has knowledge that a license under a third party's intellectual property rights is required to exercise the rights granted by such Contributor under Sections 2.1 or 2.2, Contributor must include a text file with the Source Code distribution titled "LEGAL'' which describes the claim and the party making the claim in sufficient detail that a recipient will know whom to contact. If Contributor obtains such knowledge after the Modification is made available as described in Section 3.2, Contributor shall promptly modify the LEGAL file in all copies Contributor makes available thereafter and shall take other steps (such as notifying appropriate mailing lists or newsgroups) reasonably calculated to inform those who received the Covered Code that new knowledge has been obtained. (b) Contributor APIs. If Contributor's Modifications include an application programming interface and Contributor has knowledge of patent licenses which are reasonably necessary to implement that API, Contributor must also include this information in the LEGAL file. (c) Representations. Contributor represents that, except as disclosed pursuant to Section 3.4(a) above, Contributor believes that Contributor's Modifications are Contributor's original creation(s) and/or Contributor has sufficient rights to grant the rights conveyed by this License. 3.5. Required Notices. You must duplicate the notice in Exhibit A in each file of the Source Code. If it is not possible to put such notice in a particular Source Code file due to its structure, then You must include such notice in a location (such as a relevant directory) where a user would be likely to look for such a notice. If You created one or more Modification(s) You may add your name as a Contributor to the notice described in Exhibit A. You must also

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		duplicate this License in any documentation for the Source Code where You describe recipients' rights or ownership rights relating to Covered Code. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Code. However, You may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear than any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer. 3.6. Distribution of Executable Versions. You may distribute Covered Code in Executable form only if the requirements of Section 3.1-3.5 have been met for that Covered Code, and if You include a notice stating that the Source Code version of the Covered Code is available under the terms of this License, including a description of how and where You have fulfilled the obligations of Section 3.2. The notice must be conspicuously included in any notice in an Executable version, related documentation or collateral in which You describe recipients' rights relating to the Covered Code. You may distribute the Executable version of Covered Code or ownership rights under a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable version does not attempt to limit or alter the recipient's rights in the Source Code version from the rights set forth in this License. If You distribute the Executable version under a different license You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or any Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer. 3.7. Larger Works. You may create a Larger Work by combining Covered Code with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		sure the requirements of this License are fulfilled for the Covered Code. 4. Inability to Comply Due to Statute or Regulation. If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Code due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be included in the LEGAL file described in Section 3.4 and must be included with all distributions of the Source Code. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it. 5. Application of this License. This License applies to code to which the Initial Developer has attached the notice in Exhibit A and to related Covered Code. 6. Versions of the License. 6.1. New Versions. Netscape Communications Corporation (''Netscape'') may publish revised and/or new versions of the License from time to time. Each version will be given a distinguishing version number. 6.2. Effect of New Versions. Once Covered Code has been published under a particular version of the License, You may always continue to use it under the terms of that version. You may also choose to use such Covered Code under the terms of any subsequent version of the License published by Netscape. No one other than Netscape has the right to modify the terms applicable to Covered Code created under this License. 6.3. Derivative Works. If You create or use a modified version of this License (which you may only do in order to apply it to code which is not already Covered Code governed by this License), You must (a) rename Your license so that the phrases ''Mozilla'', ''MOZILLAPL'', ''MOZPL'', ''Netscape'', "MPL", ''NPL'' or any confusingly similar phrase do not appear in your license (except to note that your license differs from this License) and (b) otherwise make it clear that Your version of the license contains terms which differ from the Mozilla Public License and Netscape Public License. (Filling in the name of the Initial Developer, Original Code or Contributor in the notice described in Exhibit A shall not of themselves be deemed to be modifications of this License.) 7. DISCLAIMER OF WARRANTY. COVERED

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		CODE IS PROVIDED UNDER THIS LICENSE ON AN "AS IS'' BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED CODE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGING. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED CODE IS WITH YOU. SHOULD ANY COVERED CODE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED CODE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER. 8. TERMINATION. 8.1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses to the Covered Code which are properly granted shall survive any termination of this License. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive. 8.2. If You initiate litigation by asserting a patent infringement claim (excluding declatory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You file such action is referred to as "Participant") al ========== END of Reference [62] ========== ========== Start of Reference [46] ========== ========== End of Reference [46] ========== ========== Start of Reference [31] ========== SOFTWARE RIGHTS ANTLR 1989-2006 Developed by Terence Parr Partially supported by University of San Francisco & jGuru.com We reserve no legal rights to the ANTLR--it is fully in the public domain. An individual or company may do whatever they wish with source code distributed with ANTLR or the code generated by ANTLR, including the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		incorporation of ANTLR, or its output, into commerical software. We encourage users to develop software with ANTLR. However, we do ask that credit is given to us for developing ANTLR. By "credit", we mean that if you use ANTLR or incorporate any source code into one of your programs (commercial product, research project, or otherwise) that you acknowledge this fact somewhere in the documentation, research report, etc... If you like ANTLR and have developed a nice tool with the output, please mention that you developed it using ANTLR. In addition, we ask that the headers remain intact in our source code. As long as these guidelines are kept, we expect to continue enhancing this system and expect to make other tools available as they are completed. The primary ANTLR guy: Terence Parr parrt@cs.usfca.edu parrt@antlr.org ================ End of Reference [31] ================ ================ Start of Reference [41] ================ Copyright 2001-2016 (C) MetaStuff, Ltd. and DOM4J contributors. All Rights Reserved. Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain copyright statements and notices. Redistributions must also contain a copy of this document. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		materials provided with the distribution. 3. The name "DOM4J" must not be used to endorse or promote products derived from this Software without prior written permission of MetaStuff, Ltd. For written permission, please contact dom4j-info@metastuff.com. 4. Products derived from this Software may not be called "DOM4J" nor may "DOM4J" appear in their names without prior written permission of MetaStuff, Ltd. DOM4J is a registered trademark of MetaStuff, Ltd. 5. Due credit should be given to the DOM4J Project - https://dom4j.github.io/ THIS SOFTWARE IS PROVIDED BY METASTUFF, LTD. AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL METASTUFF, LTD. OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ================ End of Reference [41] ================

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	Spring Boot 2.5.1	Modules: org.springframework.boot:spring-boot:jar:2.5.1 org.springframework.boot:spring-boot-autoconfigure:jar:2.5.1 org.springframework.boot:spring-boot-starter:jar:2.5.1 org.springframework.boot:spring-boot-starter-aop:jar:2.5.1 org.springframework.boot:spring-boot-starter-data-jpa:jar:2.5.1 org.springframework.boot:spring-boot-starter-jdbc:jar:2.5.1 org.springframework.boot:spring-boot-starter-json:jar:2.5.1 org.springframework.boot:spring-boot-starter-log4j2:jar:2.5.1 org.springframework.boot:spring-boot-starter-logging:jar:2.5.1 org.springframework.boot:spring-boot-starter-tomcat:jar:2.5.1 org.springframework.boot:spring-boot-starter-validation:jar:2.5.1 org.springframework.boot:spring-boot-starter-web:jar:2.5.1 License: Apache License Version 2.0 License: [0] Copyright: [1] org.springframework:spring-aop:jar:5.3.8 org.springframework:spring-aspects:jar:5.3.8 org.springframework:spring-beans:jar:5.3.8 org.springframework:spring-context:jar:5.3.8 org.springframework:spring-core:jar:5.3.8 org.springframework:spring-jcl:jar:5.3.8 org.springframework:spring-expression:jar:5.3.8 org.springframework:spring-jdbc:jar:5.3.8 org.springframework:spring-orm:jar:5.3.8 org.springframework:spring-web:jar:5.3.8 org.springframework:spring-webmvc:jar:5.3.8 org.springframework:spring-websocket:jar:5.3.8 License: Apache License Version 2.0 License: [0] Copyright: [1] Dependency: org.springframework.data:spring-data-jpa:jar:2.5.1 License: Apache License Version 2.0 + EPL and/or other similar licenses License: [2] Copyright: [3] Dependency: org.springframework.data:spring-data-commons:jar:2.5.1 License: Apache License Version 2.0 + EPL and/or other similar licenses License: [2] Copyright: [4] Dependency: io.micrometer:micrometer-core:jar:1.7.0 License: Apache License Version 2.0 License: [0] Copyright: [5] Dependency: org.aspectj:aspectjweaver:jar:1.9.6 License: Eclipse Public License Version 1.0 License: [6] Copyright: [7] Dependency: com.fasterxml:classmate:jar:1.5.1 License: Apache License Version 2.0 License: [0] Copyright: [8] Dependency: org.apache.commons:commons-lang3:jar:3.11 License: Apache License Version 2.0 License: [0] Copyright: [9] Dependency: org.hibernate.validator:hibernate-validator:jar:6.2.0.Final License: Apache License Version 2.0 License: [0] Copyright: [15] Dependency: com.zaxxer:HikariCP:jar:4.0.3 License: Apache License Version 2.0 License: [0] Copyright: [16] Dependency: jakarta.annotation:jakarta.annotation-api:jar:1.3.5 License: Eclipse Public License Version 2.0 + GPL2 w/ CPE License: [12] Copyright: [20] Dependency:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		jakarta.persistence:jakarta.persistence-api:jar:2.2.3 License: Eclipse Public License Version 2.0 License: [21] Copyright: [20] License: Eclipse Distribution License - v 1.0 License and Copyright: [22] Dependency: jakarta.transaction:jakarta.transaction-api:jar:1.3.3 License: Eclipse Public License Version 2.0 + GPL2 w/ CPE License: [12] Copyright: [20] Dependency: org.slf4j:jul-to-slf4j:jar:1.7.30 License: MIT License License: [23] Copyright: [24] Dependency: org.slf4j:slf4j-api:jar:1.7.30 License: MIT License License: [23] Copyright: [25] Dependency: org.yaml:snakeyaml:jar:1.28 License: Apache License Version 2.0 License: [0] Copyright: [26] Dependency: org.apache.tomcat.embed:tomcat-embed-core:jar:9.0.46 License: Apache License Version 2.0 License: [27] Copyright: [28] Dependency: org.jboss.logging:jboss-logging:jar:3.4.1.Final License: Apache License Version 2.0 License: [0] Copyright: [29] Dependency: net.bytebuddy:byte-buddy:jar:1.10.22 License: Apache License Version 2.0 License: [0] Copyright: [30] Dependency: antlr:antlr:jar:2.7.7 License: ANTLR 2 License License: [31] Copyright: [32] Dependency: jakarta.activation:jakarta.activation-api:jar:1.2.2 License: Eclipse Public License Version 1.0 License: [6] Copyright: [20] Dependency: org.hdrhistogram:HdrHistogram:jar:2.1.12 License: BSD License License: [35] Copyright: [36] Dependency: org.latencyutils:LatencyUtils:jar:2.0.3 License: BSD License License: [37] Copyright: [38] Dependency: org.dom4j:dom4j:jar:2.1.3 License: BSD License License: [41] Copyright: [42] Dependency: org.hibernate.common:hibernate-commons-annotations:jar:5.1.2.Final License: LGPLv2.1 License: [43] Copyright: [44] Dependency: org.javassist:javassist:jar:3.27.0-GA License: MPL 1.1 or LGPL2.1 or APL 2.0 License: [46] Copyright: [47] Dependency: com.github.stephenc.jcip:jcip-annotations:1.0-1 License: Apache License Version 2.0 License: [0] Copyright: [50] Dependency: org.reactivestreams:reactive-streams:jar:1.0.3 License: Public Domain License: [60] Copyright: [61] jackson-core [51] jackson-datatype-jdk8 [52] jackson-datatype-jsr310 [53] jackson-module-parameter-names [54] jackson-dataformat-xml [55] jackson-databind [56] jackson-annotations [57] log4j-api [58] log4j-to-slf4j [59] ++++++++++++++++++++++++++++++++ ++++++++++ References ++++++++++++ ++++++++++++++++++++++++++++++ Start of Reference [0] ================ Top Level Component Copyright: ========== /* * Copyright 2012-2020 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		the License at * * https://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== APACHE 2.0 - See Appendix E ========== End of Reference [0] ========== ========== Start of Reference [1] ========== /* * Copyright 2012-2021 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== End of Reference [1] ========== ========== Start of Reference [2] ========== APACHE 2.0 - See Appendix E ========== ========== To the extent any open source subcomponents are licensed under the EPL and/or other similar licenses that require the source code and/or modifications to source code to be made available (as would be noted above), you may obtain a copy of the source code corresponding to the binaries for such open source components and modifications thereto, if any, (the "Source Files"), by downloading the Source Files from https://www.springsource.org/ download, or by sending a request, with your name and address to: VMware, Inc., 3401 Hillview Avenue, Palo Alto, CA 94304, United States of America or email info@vmware.com. All such requests should clearly specify: OPEN SOURCE FILES REQUEST, Attention General Counsel. VMware shall mail a copy of the Source Files to you on a CD or equivalent physical medium. This offer to obtain a copy of the Source Files is valid for three years from the date you acquired this Software product. ========== End of Reference [2] ========== ========== Start of Reference [3] ========== Spring Data JPA 2.5.1 Copyright (c) [2011-2019] Pivotal Software, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for the these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the LICENSE file. ========== End of Reference [3] ========== ========== Start of Reference [4] ========== Spring Data JPA 2.5.1 (2020.0.8) Copyright (c) [2011-2019] Pivotal Software, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for the these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the LICENSE file. ========== End of Reference [4] ========== ========== Start of Reference [5] ========== Micrometer Copyright (c) 2017-Present VMware, Inc. All Rights Reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- ---- This product contains a modified portion of 'io.netty.util.internal.logging', in the Netty/Common library distributed by The Netty Project: * Copyright 2013 The Netty Project * License: Apache License v2.0 * Homepage: https://netty.io This product contains a modified portion of 'StringUtils.isBlank()', in the Commons Lang library distributed by The Apache Software Foundation: * Copyright 2001-2019 The Apache Software Foundation * License: Apache License v2.0 * Homepage: https://commons.apache.org/proper/commons-lang/ This product contains a modified portion of 'JsonUtf8Writer', in the Moshi library distributed by Square, Inc: * Copyright 2010 Google Inc. * License: Apache License v2.0 * Homepage: https://github.com/square/moshi This product contains a modified portion of the 'org.springframework.lang' package in the Spring Framework library, distributed by VMware, Inc: * Copyright 2002-2019 the original author or authors. * License: Apache License v2.0 * Homepage: https://spring.io/projects/spring-framework ========== End of Reference [5]

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== Start of Reference [6] ========== EPL Version 1.0 - See Appendix J ========== End of Reference [6] ========== ========== ========== Start of Reference [7] ========== * Copyright (c) 2005 Contributors. * All rights reserved. * This program and the accompanying materials are made available * under the terms of the Eclipse Public License v1.0 * which accompanies this distribution and is available at * http://eclipse.org/legal/epl-v10.html ========== End of Reference [7] ========== ========== Start of Reference [8] ========== Java ClassMate library was originally written by Tatu Saloranta (tatu.saloranta@iki.fi) Other developers who have contributed code are: * Brian Langel ========== End of Reference [8] ========== ========== ========== Start of Reference [9] ========== Apache Commons Lang Copyright 2001-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). ========== End of Reference [9] ========== ========== Start of Reference [12] ========== EPL Version 2.0 - See ECLIPSE 2.0 License Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License version 2 cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version. ========== End of Reference [12] ========== ========== Start of Reference [15] ========== /* * Hibernate Validator, declare and validate application constraints

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* * License: Apache License, Version 2.0 * See the license.txt file in the root directory or . */ ================ End of Reference [15] ================ ================ Start of Reference [16] ================ Copyright (C) 2013,2014 Brett Wooldridge ================ End of Reference [16] ================ ================ Start of Reference [20] ================ All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ================ End of Reference [20] ================ ================ Start of Reference [21] ================ EPL Version 2.0 - See ECLIPSE 2.0 License ================ End of Reference [21] ================ ================ Start of Reference [22] ================ EPL Version 1.0 - See Appendix J See Appendix M ================ END of Reference [22] ================ ================ Start of Reference [23] ================ Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G ================ End of Reference [23] ================ ================ Start of Reference [24] ================ Copyright (c) 2004-2017 QOS.ch ================ End of Reference [24] ================ ================ Start of Reference [25] ================ Copyright (c) 2004-2017 QOS.ch ================ End of Reference [25] ================ ================ Start of

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Reference [26] ================ Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ================ End of Reference [26] ================ ================ Start of Reference [27] ================ Apache Tomcat Copyright 1999-2021 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). This software contains code derived from netty-native developed by the Netty project (https://netty.io, https://github.com/netty/netty-tcnative/) and from finagle-native developed at Twitter (https://github.com/twitter/finagle). This software contains code derived from jgroups-kubernetes developed by the JGroups project (http://www.jgroups.org/). The Windows Installer is built with the Nullsoft Scriptable Install System (NSIS), which is open source software. The original software and related information is available at http://nsis.sourceforge.net. Java compilation software for JSP pages is provided by the Eclipse JDT Core Batch Compiler component, which is open source software. The original software and related information is available at https://www.eclipse.org/jdt/core/. org.apache.tomcat.util.json.JSONParser.jj is a public domain javacc grammar for JSON written by Robert Fischer. https://github.com/RobertFischer/json-parser For portions of the Tomcat JNI OpenSSL API and the OpenSSL JSSE integration The org.apache.tomcat.jni and the org.apache.tomcat.net.openssl packages are derivative work originating from the Netty project and the finagle-native project developed at Twitter * Copyright 2014 The Netty Project * Copyright 2014 Twitter For portions of the Tomcat cloud support The org.apache.catalina.tribes.membership.cloud package contains derivative work originating from the jgroups project. https://github.com/jgroups-extras/jgroups-kubernetes Copyright 2002-2018 Red Hat Inc. The original XML Schemas for Java EE Deployment Descriptors: - javaee_5.xsd - javaee_web_services_1_2.xsd - javaee_web_services_client_1_2.xsd - javaee_6.xsd - javaee_web_services_1_3.xsd - javaee_web_services_client_1_3.xsd - jsp_2_2.xsd - web-app_3_0.xsd - web-common_3_0.xsd - web-fragment_3_0.xsd - javaee_7.xsd -

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		javaee_web_services_1_4.xsd - javaee_web_services_client_1_4.xsd - jsp_2_3.xsd - web-app_3_1.xsd - web-common_3_1.xsd - web-fragment_3_1.xsd - javaee_8.xsd - web-app_4_0.xsd - web-common_4_0.xsd - web-fragment_4_0.xsd may be obtained from: http://www.oracle.com/webfolder/technetwork/jsc/xml/ns/javaee/index.html ========== End of Reference [27] ========== ========== Start of Reference [28] ========== # Licensed to the Apache Software Foundation (ASF) under one or more # contributor license agreements. See the NOTICE file distributed with # this work for additional information regarding copyright ownership. # The ASF licenses this file to You under the Apache License, Version 2.0 # (the "License"); you may not use this file except in compliance with # the License. You may obtain a copy of the License at # # http://www.apache.org/licenses/LICENSE-2.0 # # Unless required by applicable law or agreed to in writing, software # distributed under the License is distributed on an "AS IS" BASIS, # WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. # See the License for the specific language governing permissions and # limitations under the License. Copyright 1999-2020 The Apache Software Foundation ========== End of Reference [28] ========== ========== Start of Reference [29] ========== /* * JBoss, Home of Professional Open Source. * * Copyright 2011 Red Hat, Inc., and individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== End of Reference [29] ========== ========== Start of Reference [30] ========== /* * Copyright 2014 - Present Rafael Winterhalter * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		================ End of Reference [30] ================ ================ Start of Reference [31] ================ SOFTWARE RIGHTS ANTLR 1989-2006 Developed by Terence Parr Partially supported by University of San Francisco & jGuru.com We reserve no legal rights to the ANTLR--it is fully in the public domain. An individual or company may do whatever they wish with source code distributed with ANTLR or the code generated by ANTLR, including the incorporation of ANTLR, or its output, into commerical software. We encourage users to develop software with ANTLR. However, we do ask that credit is given to us for developing ANTLR. By "credit", we mean that if you use ANTLR or incorporate any source code into one of your programs (commercial product, research project, or otherwise) that you acknowledge this fact somewhere in the documentation, research report, etc... If you like ANTLR and have developed a nice tool with the output, please mention that you developed it using ANTLR. In addition, we ask that the headers remain intact in our source code. As long as these guidelines are kept, we expect to continue enhancing this system and expect to make other tools available as they are completed. The primary ANTLR guy: Terence Parr parrt@cs.usfca.edu parrt@antlr.org ================ End of Reference [31] ================ ================ Start of Reference [32] ================ copyright: ANTLR 1989-2006 Developed by Terence Parr Partially supported by University of San Francisco &?jGuru.com We reserve no legal rights to the ANTLR--it is fully in the public domain. An individual or company may do whatever they wish with source code distributed with ANTLR or the code generated by ANTLR, including the incorporation of ANTLR, or its output, into commerical software. ================ End of Reference [32] ================ ================ Start of Reference [35] ================ Copyright (c) 2012, 2013, 2014, 2015, 2016 Gil Tene Copyright (c) 2014 Michael Barker Copyright (c) 2014 Matt Warren All rights reserved. See Appendix M ================ End of Reference [35] ================ ================ Start of Reference [36] ================ Copyright (c) 2012, 2013, 2014, 2015, 2016 Gil Tene Copyright (c) 2014 Michael Barker Copyright (c) 2014 Matt Warren All rights reserved. ================ End of Reference [36] ================ ================ Start of Reference [37] ================ Copyright (c) 2012, 2013, 2014 Gil Tene All rights reserved. See Appendix M ================ End of Reference [37] ================ ================ Start of Reference [38] ================ Copyright (c) 2012,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		2013, 2014 Gil Tene All rights reserved. ========== End of Reference [38] ========== ========== Start of Reference [41] ========== Copyright 2001-2016 (C) MetaStuff, Ltd. and DOM4J contributors. All Rights Reserved. Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain copyright statements and notices. Redistributions must also contain a copy of this document. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. 3. The name "DOM4J" must not be used to endorse or promote products derived from this Software without prior written permission of MetaStuff, Ltd. For written permission, please contact dom4j-info@metastuff.com. 4. Products derived from this Software may not be called "DOM4J" nor may "DOM4J" appear in their names without prior written permission of MetaStuff, Ltd. DOM4J is a registered trademark of MetaStuff, Ltd. 5. Due credit should be given to the DOM4J Project - https://dom4j.github.io/ THIS SOFTWARE IS PROVIDED BY METASTUFF, LTD. AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL METASTUFF, LTD. OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. ========== End of Reference [41] ========== ========== Start of Reference [42] ========== Copyright 2001-2016 (C) MetaStuff, Ltd. and DOM4J contributors. All Rights Reserved. ========== End of Reference [42] ========== ========== Start of Reference [43] ========== LGPL v2.1 - See Appendix T ========== End of Reference [43] ========== ========== Start of

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Reference [44] ================ /* * Hibernate, Relational Persistence for Idiomatic Java * * License: GNU Lesser General Public License (LGPL), version 2.1 or later. * See the lgpl.txt file in the root directory or . */ ================ End of Reference [44] ================ ================ Start of Reference [45] ================ /* * JBoss, Home of Professional Open Source. * Copyright 2013 Red Hat, Inc., and individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ================ End of Reference [45] ================ ================ Start of Reference [46] ================ MOZILLA PUBLIC LICENSE Version 1.1 1. Definitions. 1.0.1. "Commercial Use" means distribution or otherwise making the Covered Code available to a third party. 1.1. ''Contributor'' means each entity that creates or contributes to the creation of Modifications. 1.2. ''Contributor Version'' means the combination of the Original Code, prior Modifications used by a Contributor, and the Modifications made by that particular Contributor. 1.3. ''Covered Code'' means the Original Code or Modifications or the combination of the Original Code and Modifications, in each case including portions thereof. 1.4. ''Electronic Distribution Mechanism'' means a mechanism generally accepted in the software development community for the electronic transfer of data. 1.5. ''Executable'' means Covered Code in any form other than Source Code. 1.6. ''Initial Developer'' means the individual or entity identified as the Initial Developer in the Source Code notice required by Exhibit A. 1.7. ''Larger Work'' means a work which combines Covered Code or portions thereof with code not governed by the terms of this License. 1.8. ''License'' means this document. 1.8.1. "Licensable" means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		the rights conveyed herein. 1.9. ''Modifications'' means any addition to or deletion from the substance or structure of either the Original Code or any previous Modifications. When Covered Code is released as a series of files, a Modification is: A. Any addition to or deletion from the contents of a file containing Original Code or previous Modifications. B. Any new file that contains any part of the Original Code or previous Modifications. 1.10. ''Original Code'' means Source Code of computer software code which is described in the Source Code notice required by Exhibit A as Original Code, and which, at the time of its release under this License is not already Covered Code governed by this License. 1.10.1. "Patent Claims" means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor. 1.11. ''Source Code'' means the preferred form of the Covered Code for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an Executable, or source code differential comparisons against either the Original Code or another well known, available Covered Code of the Contributor's choice. The Source Code can be in a compressed or archival form, provided the appropriate decompression or de-archiving software is widely available for no charge. 1.12. "You'' (or "Your") means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License or a future version of this License issued under Section 6.1. For legal entities, "You'' includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, "control'' means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity. 2. Source Code License. 2.1. The Initial Developer Grant. The Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license, subject to third party intellectual property claims: (a) under intellectual property rights (other than patent or trademark) Licensable by Initial

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Developer to use, reproduce, modify, display, perform, sublicense and distribute the Original Code (or portions thereof) with or without Modifications, and/or as part of a Larger Work; and (b) under Patents Claims infringed by the making, using or selling of Original Code, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Code (or portions thereof). (c) the licenses granted in this Section 2.1(a) and (b) are effective on the date Initial Developer first distributes Original Code under the terms of this License. (d) Notwithstanding Section 2.1(b) above, no patent license is granted: 1) for code that You delete from the Original Code; 2) separate from the Original Code; or 3) for infringements caused by: i) the modification of the Original Code or ii) the combination of the Original Code with other software or devices. 2.2. Contributor Grant. Subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license (a) under intellectual property rights (other than patent or trademark) Licensable by Contributor, to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof) either on an unmodified basis, with other Modifications, as Covered Code and/or as part of a Larger Work; and (b) under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: 1) Modifications made by that Contributor (or portions thereof); and 2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination). (c) the licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first makes Commercial Use of the Covered Code. (d) Notwithstanding Section 2.2(b) above, no patent license is granted: 1) for any code that Contributor has deleted from the Contributor Version; 2) separate from the Contributor Version; 3) for infringements caused by: i) third party modifications of Contributor Version or ii) the combination of

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or 4) under Patent Claims infringed by Covered Code in the absence of Modifications made by that Contributor. 3. Distribution Obligations. 3.1. Application of License. The Modifications which You create or to which You contribute are governed by the terms of this License, including without limitation Section 2.2. The Source Code version of Covered Code may be distributed only under the terms of this License or a future version of this License released under Section 6.1, and You must include a copy of this License with every copy of the Source Code You distribute. You may not offer or impose any terms on any Source Code version that alters or restricts the applicable version of this License or the recipients' rights hereunder. However, You may include an additional document offering the additional rights described in Section 3.5. 3.2. Availability of Source Code. Any Modification which You create or to which You contribute must be made available in Source Code form under the terms of this License either on the same media as an Executable version or via an accepted Electronic Distribution Mechanism to anyone to whom you made an Executable version available; and if made available via Electronic Distribution Mechanism, must remain available for at least twelve (12) months after the date it initially became available, or at least six (6) months after a subsequent version of that particular Modification has been made available to such recipients. You are responsible for ensuring that the Source Code version remains available even if the Electronic Distribution Mechanism is maintained by a third party. 3.3. Description of Modifications. You must cause all Covered Code to which You contribute to contain a file documenting the changes You made to create that Covered Code and the date of any change. You must include a prominent statement that the Modification is derived, directly or indirectly, from Original Code provided by the Initial Developer and including the name of the Initial Developer in (a) the Source Code, and (b) in any notice in an Executable version or related documentation in which You describe the origin or ownership of the Covered Code. 3.4. Intellectual Property Matters (a) Third Party Claims. If

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Contributor has knowledge that a license under a third party's intellectual property rights is required to exercise the rights granted by such Contributor under Sections 2.1 or 2.2, Contributor must include a text file with the Source Code distribution titled "LEGAL'' which describes the claim and the party making the claim in sufficient detail that a recipient will know whom to contact. If Contributor obtains such knowledge after the Modification is made available as described in Section 3.2, Contributor shall promptly modify the LEGAL file in all copies Contributor makes available thereafter and shall take other steps (such as notifying appropriate mailing lists or newsgroups) reasonably calculated to inform those who received the Covered Code that new knowledge has been obtained. (b) Contributor APIs. If Contributor's Modifications include an application programming interface and Contributor has knowledge of patent licenses which are reasonably necessary to implement that API, Contributor must also include this information in the LEGAL file. (c) Representations. Contributor represents that, except as disclosed pursuant to Section 3.4(a) above, Contributor believes that Contributor's Modifications are Contributor's original creation(s) and/or Contributor has sufficient rights to grant the rights conveyed by this License. 3.5. Required Notices. You must duplicate the notice in Exhibit A in each file of the Source Code. If it is not possible to put such notice in a particular Source Code file due to its structure, then You must include such notice in a location (such as a relevant directory) where a user would be likely to look for such a notice. If You created one or more Modification(s) You may add your name as a Contributor to the notice described in Exhibit A. You must also duplicate this License in any documentation for the Source Code where You describe recipients' rights or ownership rights relating to Covered Code. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Code. However, You may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear than any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer. 3.6. Distribution of Executable Versions. You may distribute Covered Code in Executable form only if the requirements of Section 3.1-3.5 have been met for that Covered Code, and if You include a notice stating that the Source Code version of the Covered Code is available under the terms of this License, including a description of how and where You have fulfilled the obligations of Section 3.2. The notice must be conspicuously included in any notice in an Executable version, related documentation or collateral in which You describe recipients' rights relating to the Covered Code. You may distribute the Executable version of Covered Code or ownership rights under a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable version does not attempt to limit or alter the recipient's rights in the Source Code version from the rights set forth in this License. If You distribute the Executable version under a different license You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or any Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer. 3.7. Larger Works. You may create a Larger Work by combining Covered Code with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Code. 4. Inability to Comply Due to Statute or Regulation. If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Code due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be included in the LEGAL file described in Section 3.4 and must be included with all distributions of the Source Code.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it. 5. Application of this License. This License applies to code to which the Initial Developer has attached the notice in Exhibit A and to related Covered Code. 6. Versions of the License. 6.1. New Versions. Netscape Communications Corporation (''Netscape'') may publish revised and/or new versions of the License from time to time. Each version will be given a distinguishing version number. 6.2. Effect of New Versions. Once Covered Code has been published under a particular version of the License, You may always continue to use it under the terms of that version. You may also choose to use such Covered Code under the terms of any subsequent version of the License published by Netscape. No one other than Netscape has the right to modify the terms applicable to Covered Code created under this License. 6.3. Derivative Works. If You create or use a modified version of this License (which you may only do in order to apply it to code which is not already Covered Code governed by this License), You must (a) rename Your license so that the phrases ''Mozilla'', ''MOZILLAPL'', ''MOZPL'', ''Netscape'', "MPL", ''NPL'' or any confusingly similar phrase do not appear in your license (except to note that your license differs from this License) and (b) otherwise make it clear that Your version of the license contains terms which differ from the Mozilla Public License and Netscape Public License. (Filling in the name of the Initial Developer, Original Code or Contributor in the notice described in Exhibit A shall not of themselves be deemed to be modifications of this License.) 7. DISCLAIMER OF WARRANTY. COVERED CODE IS PROVIDED UNDER THIS LICENSE ON AN "AS IS'' BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED CODE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGING. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED CODE IS WITH YOU. SHOULD ANY COVERED CODE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED CODE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER. 8. TERMINATION. 8.1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses to the Covered Code which are properly granted shall survive any termination of this License. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive. 8.2. If You initiate litigation by asserting a patent infringement claim (excluding declatory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You file such action is referred to as "Participant") al ================ End of Reference [46] ================ ================ Start of Reference [47] ================ /* * Javassist, a Java-bytecode translator toolkit. * Copyright (C) 1999- Shigeru Chiba. All Rights Reserved. * * The contents of this file are subject to the Mozilla Public License Version * 1.1 (the "License"); you may not use this file except in compliance with * the License. Alternatively, the contents of this file may be used under * the terms of the GNU Lesser General Public License Version 2.1 or later, * or the Apache License Version 2.0. * * Software distributed under the License is distributed on an "AS IS" basis, * WITHOUT WARRANTY OF ANY KIND, either express or implied. See the License * for the specific language governing rights and limitations under the * License. */ ================ End of Reference [47] ================ ================ Start of Reference [50] ================ /*

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Copyright 2013 Stephen Connolly. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ================ End of Reference [50] ================ ================ Start of Reference [51] ================ jackson-core Jackson JSON-processor. Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi ================ End of Reference [51] ================ ================ Start of Reference [52] ================ jackson-datatype-jdk8 FOURTH-PARTY DEPENDENCY COPYRIGHT NOTICES : Copyright 2013 FasterXML.com Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

		WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
		See the license for the specific language governing permissions and
		limitations under the license.
		
		================ End of Reference [52] ================
		
		================ Start of Reference [53] ================
		jackson-datatype-jsr310
		
		  Copyright 2013 FasterXML.com
		
		  Licensed under the Apache License, Version 2.0 (the "License"); you may
		  not use this file except in compliance with the License. You may obtain
		  a copy of the License at
		
		  http://www.apache.org/licenses/LICENSE-2.0
		
		  Unless required by applicable law or agreed to in writing, software
		  distributed under the License is distributed on an "AS IS" BASIS,
		  WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
		  See the license for the specific language governing permissions and
		  limitations under the license.
		
		================ End of Reference [53] ================
		
		================ Start of Reference [54] ================
		
		FOURTH-PARTY DEPENDENCY : jackson-module-parameter-names
		
		Copyright 2013 FasterXML.com
		
		Licensed under the Apache License, Version 2.0 (the "License"); you may
		not use this file except in compliance with the License. You may obtain
		a copy of the License at
		
		  http://www.apache.org/licenses/LICENSE-2.0
		
		Unless required by applicable law or agreed to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the license for the specific language governing permissions and limitations under the license. ================ End of Reference [54] ================ ================ Start of Reference [55] ================ FOURTH-PARTY DEPENDENCY NAME : jackson- dataformat-xml # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers, as well as supported commercially by FasterXML.com. ## Licensing Jackson core and extension components may be licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (http://fasterxml.com). ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ================ End of Reference [55] ================ ================ End of Reference [56]

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== FOURTH-PARTY DEPENDENCY NAME: jackson-databind FOURTH-PARTY DEPENDENCY COPYRIGHT NOTICES: # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers, as well as supported commercially by FasterXML.com. ## Licensing Jackson core and extension components may be licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (http://fasterxml.com). ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ========== End of Reference [56] ========== ========== start of Reference [57] ========== FOURTH-PARTY DEPENDENCY NAME : jackson-annotations Copyright © 2008-2020 FasterXML. All rights reserved. ========== End of Reference [57] ========== ========== Start of Reference [58] ========== FOURTH-PARTY DEPENDENCY NAME: log4j-api

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Apache Log4j API Copyright 1999-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ================ End of Reference [58] ================ ================ Start of Reference [59] ================ FOURTH-PARTY DEPENDENCY NAME : log4j-to-slf4j Apache Log4j to SLF4J Adapter Copyright 1999-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ================ End of Reference [59] ================ ================ Start of Reference [60] ================ Licensed under Public Domain (CC0) To the extent possible under law, the person who associated CC0 with this code has waived all copyright and related or neighboring rights to this code. You should have received a copy of the CC0 legalcode along with this work. If not, see . ================ End of Reference [60] ================ ================ Start of Reference [61] ================ Licensed under Public Domain (CC0) To the extent possible under law, the person who associated CC0 with this code has waived all copyright and related or neighboring rights to this code.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		You should have received a copy of the CC0 legalcode along with this work. If not, see . ================ End of Reference [61] ================
Pivotal Software, Inc	spring-boot-autoconfigure 2.2.4	APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-devtools 2.7.1	Top Level Component Copyright: ========== Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== org.springframework.boot:spring-boot-devtools /* * Copyright 2012-2019 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Notice: Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== ========== ======== Apache License APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Fourth Party Dependencies: spring-boot spring-boot-autoconfigure APACHE 2.0 - See Appendix E Fourth Party Dependencies: spring-core spring-jcl spring-context spring-aop spring-beans spring-expression APACHE 2.0 - See Appendix E Notice: Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software Inc.	Spring-boot-starter 2.7.4	Top Level Component Copyright: ========== Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== = org.springframework.boot:spring-boot-starter License: Apache License 2.0 [0] Copyright: /* * Copyright 2012-2022 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== == Fourth Party Dependencies: org.springframework.boot:spring-boot org.springframework.boot:spring-boot-autoconfigure org.springframework.boot:spring-boot-starter-logging License: Apache License 2.0 [0] Copyright:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		/* * Copyright 2012-2022 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Notice: Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== ========== == Fourth Party Dependencies: org.springframework:spring-context org.springframework:spring-aop org.springframework:spring-beans org.springframework:spring-expression org.springframework:spring-core org.springframework:spring-jcl License: Apache License 2.0 [0] Copyright: /* * Copyright 2012-2022 Pivotal Software, Inc. *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Notice: Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ========== ========== == Fourth Party Dependencies: ch.qos.logback:logback-classic ch.qos.logback:logback-core License : GNU Lesser General Public License version 2.1, Eclipse Public License v1.0 [1],[2] Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2017, QOS.ch. All rights reserved.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. Oracle elects the EPL. ========== ========== == Fourth Party Dependencies: org.apache.logging.log4j:log4j-to-slf4j org.apache.logging.log4j:log4j-api License : Apache License Version 2.0 [0] Copyright 1999-2022 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Notice: Apache Log4j Copyright 1999-2021 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/).

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma ========== ========== ========== Fourth-Party Dependencies org.slf4j:slf4j-api org.slf4j:jul-to-slf4j License : MIT License Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland) All rights reserved. See Appendix G ========== ========== ========== Fourth-Party Dependencies jakarta.annotation:jakarta.annotation-api License : Eclipse Public License - v 2.0 and GNU General Public License, version 2 with CPE [3] Copyright: ---------- /* * Copyright (c) 2005, 2020 Oracle and/or its affiliates. All rights reserved. * * This program and the accompanying materials are made available under the * terms of the Eclipse Public License v. 2.0, which is available at * http://www.eclipse.org/legal/epl-2.0. * * This Source Code may also be made available under the following Secondary * Licenses when the conditions for such availability set forth in the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Eclipse Public License v. 2.0 are satisfied: GNU General Public License, * version 2 with the GNU Classpath Exception, which is available at * https://www.gnu.org/software/classpath/license.html. * * SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 */ Oracle elects the EPL. ---------- Notice: # Notices for Jakarta Annotations This content is produced and maintained by the Jakarta Annotations project. * Project home: https://projects.eclipse.org/projects/ee4j.ca ## Trademarks Jakarta Annotations is a trademark of the Eclipse Foundation. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/common-annotations-api ## Third-party Content ## Cryptography

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ========== ========== ========== Fourth-Party Dependencies org.yaml snakeyaml License : Apache License Version 2.0 [0] Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== ========== License References are mentioned below. ========== Start License Reference [0] ========== APACHE 2.0 GNU LESSER GENERAL PUBLIC LICENSE - v 2.1 Eclipse Public License - v 1.0 Eclipse Public License - v 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-actuator 2.7.1	Top-Level Component Copyright: ---------- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== org.springframework.boot:spring-boot-starter-actuator: APACHE 2.0 - See Appendix E Fourth-Party Dependencies org.springframework.boot spring-boot org.springframework.boot spring-boot-autoconfigure org.springframework.boot spring-boot-starter org.springframework.boot spring-boot-starter-logging org.springframework.boot spring-boot-actuator-autoconfigure org.springframework.boot spring-boot-actuator APACHE 2.0 - See Appendix E Notices: Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== org.springframework spring-aop org.springframework spring-beans org.springframework spring-context org.springframework spring-core org.springframework spring-expression org.springframework spring-jcl APACHE 2.0 - See Appendix E Fourth-Party Dependencies org.apache.logging.log4j log4j-api

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.apache.logging.log4j log4j-to-slf4j APACHE 2.0 - See Appendix E Apache Log4j Copyright 1999-2021 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma TimeoutBlockingWaitStrategy.java and parts of Util.java Copyright 2011 LMAX Ltd. ========== Fourth-Party Dependencies ch.qos.logback logback-classic ch.qos.logback logback-core License : GNU Lesser General Public License version 2.1, Eclipse Public License v1.0 Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2017, QOS.ch. All rights reserved. This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. --- Eclipse Public License - v 1.0 - See Appendix J Fourth-Party Dependencies org.slf4j:slf4j-api

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2004-2022 QOS.ch All rights reserved. MIT License - See Appendix G Eclipse Public License - v 2.0 - See Appendix Y

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
	spring-boot-starter-data-jpa 2.7.4	Top Level Component Copyright: --- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== org.springframework.boot:spring-boot-starter-data-jpa: License : Apache License Version 2.0 [0] Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Notice: --- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== Fourth-Party Dependencies org.springframework spring-aop

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.springframework spring-aspects org.springframework spring-beans org.springframework spring-context org.springframework spring-core org.springframework spring-expression org.springframework spring-jcl org.springframework spring-jdbc org.springframework spring-orm License : Apache License Version 2.0 [0] Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Notice: --- Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Fourth-Party Dependencies org.springframework.data spring-data-commons org.springframework.data spring-data-jpa License : Apache License Version 2.0 [0] Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Notice: --- Spring Data Commons Copyright (c) [2010-2021] Pivotal Software, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for the these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the LICENSE file. --- Spring Data JPA Copyright (c) [2011-2019] Pivotal Software, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for the these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the LICENSE file. ========== ========== ========== Fourth-Party Dependencies org.springframework.boot spring-boot org.springframework.boot spring-boot-autoconfigure org.springframework.boot spring-boot-starter org.springframework.boot spring-boot-starter-aop org.springframework.boot spring-boot-starter-jdbc org.springframework.boot spring-boot-starter-logging License : Apache License Version 2.0 [0] Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Notice: --- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== ========== Fourth-Party Dependencies org.apache.logging.log4j log4j-api org.apache.logging.log4j log4j-to-slf4j License : Apache License Version 2.0 [0] Copyright 1999-2022 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Notice: Apache Log4j Copyright 1999-2019 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma TimeoutBlockingWaitStrategy.java and parts of Util.java

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2011 LMAX Ltd. ========== ========== ========== Fourth-Party Dependencies ch.qos.logback logback-classic ch.qos.logback logback-core License : GNU Lesser General Public License version 2.1, Eclipse Public License v1.0 Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2017, QOS.ch. All rights reserved. This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. License text : [1], [2] in License reference. ========== ========== ========== Fourth-Party Dependencies org.slf4j jul-to-slf4j org.slf4j slf4j-api License : MIT License Common Copyright: Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland) All rights reserved. See Appendix G ========== ========== ========== Fourth-Party Dependencies jakarta.annotation jakarta.annotation-api jakarta.transaction jakarta.transaction-api License : Eclipse Public License - v 2.0 with GNU General Public License, version 2 with CPE [3] /*

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Copyright (c) 2005, 2020 Oracle and/or its affiliates. All rights reserved. * * This program and the accompanying materials are made available under the * terms of the Eclipse Public License v. 2.0, which is available at * http://www.eclipse.org/legal/epl-2.0. * * This Source Code may also be made available under the following Secondary * Licenses when the conditions for such availability set forth in the * Eclipse Public License v. 2.0 are satisfied: GNU General Public License, * version 2 with the GNU Classpath Exception, which is available at * https://www.gnu.org/software/classpath/license.html. * * SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 */ ---------- Notices: ---------- # Notices for Jakarta Annotations This content is produced and maintained by the Jakarta Annotations project. * Project home: https://projects.eclipse.org/projects/ee4j.ca ## Trademarks Jakarta Annotations is a trademark of the Eclipse Foundation. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/common-annotations-api ## Third-party Content ## Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. --- # Notices for Jakarta Transactions This content is produced and maintained by the Jakarta Transactions project. * Project home: https://projects.eclipse.org/projects/ee4j.jta ## Trademarks Jakarta Transactions is a trademark of the Eclipse Foundation. ## Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/jta-api ## Third-party Content This project leverages the following third party content. None ## Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ========== ========== ========== Fourth-Party Dependencies jakarta.persistence jakarta.persistence-api License : Eclipse Public License - v 2.0 and Eclipse Distribution License - v 1.0 [5] /* * Copyright (c) 2008, 2020 Oracle and/or its affiliates. All rights reserved. * * This program and the accompanying materials are made available under the * terms of the Eclipse Public License v. 2.0 which is available at

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* http://www.eclipse.org/legal/epl-2.0, * or the Eclipse Distribution License v. 1.0 which is available at * http://www.eclipse.org/org/documents/edl-v10.php. * * SPDX-License-Identifier: EPL-2.0 OR BSD-3-Clause */ ---------- Notice ---------- # Notices for Jakarta Persistence This content is produced and maintained by the Jakarta Persistence project. * Project home: https://projects.eclipse.org/projects/ee4j.jpa ## Trademarks Jakarta Persistence is a trademark of the Eclipse Foundation. ## Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0, or the Eclipse Distribution License v. 1.0 which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: EPL-2.0 OR BSD-3-Clause ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/jpa-api ## Third-party Content This project leverages the following third party content. None ## Cryptography

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ========== Fourth-Party Dependencies org.yaml snakeyaml License : Apache License Version 2.0 Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. License text : [0] in License reference. ========== Fourth-Party Dependencies com.zaxxer HikariCP License : Apache License Version 2.0 Copyright (C) 2013,2014 Brett Wooldridge Licensed under the Apache License, Version 2.0 (the "License");

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. License text : [0] in License reference. ========== ========== ========== Fourth-Party Dependencies org.aspectj aspectjweaver License: EPL 2.0 License text : [6] in License reference. Copyright: / ********** * Copyright (c) 2007 Contributors. All rights reserved. * This program and the accompanying materials are made available * under the terms of the Eclipse Public License v 2.0 * which accompanies this distribution and is available at * https://www.eclipse.org/org/documents/epl-2.0/EPL-2.0.txt * * Contributors: IBM Corporation - initial API and implementation * Helen Hawkins - initial version (bug 148190) ********** ***/ ========== ========== ========== Fourth-Party Dependencies org.jboss jandex org.jboss.logging jboss-logging

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		License : Apache License Version 2.0 JBoss, Home of Professional Open Source. Copyright 2013 Red Hat, Inc., and individual contributors as indicated by the @author tags. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. License text : [0] in License reference. ========== ========== ========== Fourth-Party Dependencies net.bytebuddy byte-buddy License : Apache License Version 2.0 /* * Copyright 2014 - Present Rafael Winterhalter * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* See the License for the specific language governing permissions and * limitations under the License. */ --- Notice --- Copyright ${project.inceptionYear} - ${current.year} ${copyright.holder} Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== ========== Fourth-Party Dependencies com.fasterxml classmate License : Apache License Version 2.0 Copyright (c) 2019 Tatu Saloranta This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. License text : [0] in License reference.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- Notice ---------- Java ClassMate library was originally written by Tatu Saloranta (tatu.saloranta@iki.fi) Other developers who have contributed code are: * Brian Langel ========== Fourth-Party Dependencies antlr antlr License : The BSD License Copyright (c) 2012 Terence Parr and Sam Harwell All rights reserved. See Appendix M License text : [4] in License reference. ========== Fourth-Party Dependencies org.hibernate.common hibernate-commons-annotations License : LGPL 2.1 [1] Copyright 2001-2015 Red Hat, Inc. All Rights Reserved. This software and its documentation are distributed under the terms of the GNU Lesser General Public License v2.1 or later. /* * Hibernate, Relational Persistence for Idiomatic Java * * License: GNU Lesser General Public License (LGPL), version 2.1 or later. * See the lgpl.txt file in the root directory or . */ ========== Fourth-Party Dependencies org.hibernate hibernate-core License : LGPL 2.1 [1] Copyright:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2008, Red Hat Middleware LLC or third-party contributors as indicated by the @author tags or express copyright attribution statements applied by the authors. All third-party contributions are distributed under license by Red Hat Middleware LLC. This copyrighted material is made available to anyone wishing to use, modify, copy, or redistribute it subject to the terms and conditions of the GNU Lesser General Public License, as published by the Free Software Foundation. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this distribution; if not, write to: Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor Boston, MA 02110-1301 USA /* * Hibernate, Relational Persistence for Idiomatic Java * * License: GNU Lesser General Public License (LGPL), version 2.1 or later. * See the lgpl.txt file in the root directory or . */ ========== ========== ========== Fourth-Party Dependencies org.glassfish.jaxb:jaxb-runtime (https://github.com/javaee/jaxb-v2/blob/2.3.1-RC1/jaxb-ri/runtime/pom.xml) org.glassfish.jaxb:txw2 (https://github.com/javaee/jaxb-v2/blob/2.3.1-RC1/jaxb-ri/txw/pom.xml) Copyright (c) 2013-2018 Oracle and/or its affiliates. All rights reserved. The contents of this file are subject to the terms of either the GNU

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		General Public License Version 2 only ("GPL") or the Common Development and Distribution License("CDDL") (collectively, the "License"). You may not use this file except in compliance with the License. You can obtain a copy of the License at https://oss.oracle.com/licenses/CDDL+GPL-1.1 or LICENSE.txt. See the License for the specific language governing permissions and limitations under the License. When distributing the software, include this License Header Notice in each file and include the License file at LICENSE.txt. GPL Classpath Exception: Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the GPL Version 2 section of the License file that accompanied this code. Modifications: If applicable, add the following below the License Header, with the fields enclosed by brackets [] replaced by your own identifying information: "Portions Copyright [year] [name of copyright owner]" Contributor(s): If you wish your version of this file to be governed by only the CDDL or only the GPL Version 2, indicate your decision by adding "[Contributor] elects to include this software in this distribution under the [CDDL or GPL Version 2] license." If you don't indicate a single choice of license, a recipient has the option to distribute your version of this file under either the CDDL, the GPL Version 2 or to extend the choice of license to its licensees as provided above. However, if you add GPL Version 2 code and therefore, elected the GPL Version 2 license, then the option applies only if the new code is made subject to such option by the copyright holder.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== ========== Fourth-Party Dependencies com.sun.istack:istack-commons-runtime (https://github.com/eclipse-ee4j/jaxb-istack-commons/blob/3.0.8/LICENSE.md) org.jvnet.staxex:stax-ex (https://github.com/eclipse-ee4j/jaxb-stax-ex/blob/1.8.1/LICENSE.md) Copyright (c) 2017 Oracle and/or its affiliates. All rights reserved. See Appendix M ---------- Notice (https://github.com/eclipse-ee4j/jaxb-istack-commons/blob/3.0.8/NOTICE.md) (https://github.com/eclipse-ee4j/jaxb-stax-ex/blob/1.8.1/NOTICE.md) ---------- Notices for Eclipse Implementation of JAXB This content is produced and maintained by the Eclipse Implementation of JAXB project. Project home: https://projects.eclipse.org/projects/ee4j.jaxb-impl Trademarks Eclipse Implementation of JAXB is a trademark of the Eclipse Foundation. Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Distribution License v. 1.0 which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: BSD-3-Clause Source Code The project maintains the following source code repositories: https://github.com/eclipse-ee4j/jaxb-ri https://github.com/eclipse-ee4j/jaxb-istack-commons https://github.com/eclipse-ee4j/jaxb-dtd-parser https://github.com/eclipse-ee4j/jaxb-fi

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		https://github.com/eclipse-ee4j/jaxb-stax-ex https://github.com/eclipse-ee4j/jax-rpc-ri Third-party Content This project leverages the following third party content. Apache Ant (1.10.2) License: Apache-2.0 AND W3C AND LicenseRef-Public-Domain Apache Ant (1.10.2) License: Apache-2.0 AND W3C AND LicenseRef-Public-Domain Apache Felix (1.2.0) License: Apache License, 2.0 args4j (2.33) License: MIT License dom4j (1.6.1) License: Custom license based on Apache 1.1 file-management (3.0.0) License: Apache-2.0 Project: https://maven.apache.org/shared/file-management/ Source: https://svn.apache.org/viewvc/maven/shared/tags/file-management-3.0.0/ JUnit (4.12) License: Eclipse Public License JUnit (4.12) License: Eclipse Public License maven-compat (3.5.2) License: Apache-2.0 Project: https://maven.apache.org/ref/3.5.2/maven-compat/ Source: https://mvnrepository.com/artifact/org.apache.maven/maven-compat/3.5.2 maven-core (3.5.2) License: Apache-2.0 Project: https://maven.apache.org/ref/3.5.2/maven-core/index.html Source: https://mvnrepository.com/artifact/org.apache.maven/maven-core/3.5.2 maven-plugin-annotations (3.5) License: Apache-2.0 Project: https://maven.apache.org/plugin-tools/maven-plugin-annotations/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Source: https://github.com/apache/maven-plugin-tools/tree/master/maven-plugin-annotations maven-plugin-api (3.5.2) License: Apache-2.0 maven-resolver-api (1.1.1) License: Apache-2.0 maven-resolver-api (1.1.1) License: Apache-2.0 maven-resolver-connector-basic (1.1.1) License: Apache-2.0 maven-resolver-impl (1.1.1) License: Apache-2.0 maven-resolver-spi (1.1.1) License: Apache-2.0 maven-resolver-transport-file (1.1.1) License: Apache-2.0 Project: https://maven.apache.org/resolver/maven-resolver-transport-file/ Source: https://github.com/apache/maven-resolver/tree/master/maven-resolver-transport-file maven-resolver-util (1.1.1) License: Apache-2.0 maven-settings (3.5.2) License: Apache-2.0 Source: https://mvnrepository.com/artifact/org.apache.maven/maven-settings/3.5.2 OSGi Service Platform Core Companion Code (6.0) License: Apache License, 2.0 plexus-archiver (3.5) License: Apache-2.0 Project: https://codehaus-plexus.github.io/plexus-archiver/ Source: https://github.com/codehaus-plexus/plexus-archiver plexus-io (3.0.0) License: Apache-2.0 plexus-utils (3.1.0) License: Apache- 2.0 or Apache- 1.1 or BSD or Public Domain or Indiana University Extreme! Lab Software License V1.1.1 (Apache 1.1 style) relaxng-datatype (1.0) License: New BSD license

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Sax (0.2) License: SAX-PD Project: http://www.megginson.com/downloads/SAX/ Source: http://sourceforge.net/project/showfiles.php?group_id=29449 testng (6.14.2) License: Apache-2.0 AND (MIT OR GPL-1.0+) Project: https://testng.org/doc/index.html Source: https://github.com/cbeust/testng wagon-http-lightweight (3.0.0) License: Pending Project: https://maven.apache.org/wagon/ Source: https://mvnrepository.com/artifact/org.apache.maven.wagon/wagon-http-lightweight/3.0.0 xz for java (1.8) License: LicenseRef-Public-Domain Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ========== ========== ========== Fourth-Party Dependencies com.sun.xml.fastinfoset:FastInfoset License : Apache 2.0 [0] /* * DO NOT ALTER OR REMOVE COPYRIGHT NOTICES OR THIS HEADER. * * Copyright (c) 2004, 2022 Oracle and/or its affiliates. All rights reserved. * * Oracle licenses this file to You under the Apache License, Version 2.0 * (the "License"); you may not use this file except in compliance with * the License. You may obtain a copy of the License at

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- Notice --- # Notices for Eclipse Implementation of JAXB This content is produced and maintained by the Eclipse Implementation of JAXB project. * Project home: https://projects.eclipse.org/projects/ee4j.jaxb-impl ## Trademarks Eclipse Implementation of JAXB is a trademark of the Eclipse Foundation. ## Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Distribution License v. 1.0 which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: BSD-3-Clause ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/jaxb-ri * https://github.com/eclipse-ee4j/jaxb-istack-commons

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* https://github.com/eclipse-ee4j/jaxb-dtd-parser * https://github.com/eclipse-ee4j/jaxb-fi * https://github.com/eclipse-ee4j/jaxb-stax-ex * https://github.com/eclipse-ee4j/jax-rpc-ri ## Third-party Content This project leverages the following third party content. Apache Ant (1.10.2) * License: Apache-2.0 AND W3C AND LicenseRef-Public-Domain Apache Ant (1.10.2) * License: Apache-2.0 AND W3C AND LicenseRef-Public-Domain Apache Felix (1.2.0) * License: Apache License, 2.0 args4j (2.33) * License: MIT License dom4j (1.6.1) * License: Custom license based on Apache 1.1 file-management (3.0.0) * License: Apache-2.0 * Project: https://maven.apache.org/shared/file-management/ * Source: https://svn.apache.org/viewvc/maven/shared/tags/file-management-3.0.0/ JUnit (4.12) * License: Eclipse Public License JUnit (4.12) * License: Eclipse Public License maven-compat (3.5.2) * License: Apache-2.0 * Project: https://maven.apache.org/ref/3.5.2/maven-compat/ * Source: https://mvnrepository.com/artifact/org.apache.maven/maven-compat/3.5.2 maven-core (3.5.2) * License: Apache-2.0 * Project: https://maven.apache.org/ref/3.5.2/maven-core/index.html

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Source: https://mvnrepository.com/artifact/org.apache.maven/maven-core/3.5.2 maven-plugin-annotations (3.5) * License: Apache-2.0 * Project: https://maven.apache.org/plugin-tools/maven-plugin-annotations/ * Source: https://github.com/apache/maven-plugin-tools/tree/master/maven-plugin-annotations maven-plugin-api (3.5.2) * License: Apache-2.0 maven-resolver-api (1.1.1) * License: Apache-2.0 maven-resolver-api (1.1.1) * License: Apache-2.0 maven-resolver-connector-basic (1.1.1) * License: Apache-2.0 maven-resolver-impl (1.1.1) * License: Apache-2.0 maven-resolver-spi (1.1.1) * License: Apache-2.0 maven-resolver-transport-file (1.1.1) * License: Apache-2.0 * Project: https://maven.apache.org/resolver/maven-resolver-transport-file/ * Source: https://github.com/apache/maven-resolver/tree/master/maven-resolver-transport-file maven-resolver-util (1.1.1) * License: Apache-2.0 maven-settings (3.5.2) * License: Apache-2.0 * Source: https://mvnrepository.com/artifact/org.apache.maven/maven-settings/3.5.2 OSGi Service Platform Core Companion Code (6.0) * License: Apache License, 2.0 plexus-archiver (3.5) * License: Apache-2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Project: https://codehaus-plexus.github.io/plexus-archiver/ * Source: https://github.com/codehaus-plexus/plexus-archiver plexus-io (3.0.0) * License: Apache-2.0 plexus-utils (3.1.0) * License: Apache- 2.0 or Apache- 1.1 or BSD or Public Domain or Indiana University Extreme! Lab Software License V1.1.1 (Apache 1.1 style) relaxng-datatype (1.0) * License: New BSD license Sax (0.2) * License: SAX-PD * Project: http://www.megginson.com/downloads/SAX/ * Source: http://sourceforge.net/project/showfiles.php?group_id=29449 testng (6.14.2) * License: Apache-2.0 AND (MIT OR GPL-1.0+) * Project: https://testng.org/doc/index.html * Source: https://github.com/cbeust/testng wagon-http-lightweight (3.0.0) * License: Pending * Project: https://maven.apache.org/wagon/ * Source: https://mvnrepository.com/artifact/org.apache.maven.wagon/wagon-http-lightweight/3.0.0 xz for java (1.8) * License: LicenseRef-Public-Domain ## Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== ========== License References are mentioned below. ========== Start License Reference [0] ========== Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION 1. Definitions. "License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document. "Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License. "Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity. "You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License. "Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files. "Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		not limited to compiled object code, generated documentation, and conversions to other media types. "Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below). "Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof. "Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		designated in writing by the copyright owner as "Not a Contribution." "Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work. 2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form. 3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions: (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and (b) You must cause any modified files to carry prominent notices stating that You changed the files; and (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License. 5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions. 6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file. 7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License. 8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages. 9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability. END OF TERMS AND CONDITIONS

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright [yyyy] [name of copyright owner] Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== End License Reference [0] ========== ========== Start License Reference [1] ========== GNU LESSER GENERAL PUBLIC LICENSE Version 2.1, February 1999 Copyright (C) 1991, 1999 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA see Appendix T

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		That's all there is to it! ========== End License Reference [1] ========== ========== Start License Reference [2] ========== Eclipse Public License - v 1.0 Appendix J ========== End License Reference [2] ========== ========== Start License Reference [3] ========== Eclipse Public License - v 2.0 with GNU General Public License, version 2 with CPE Eclipse Public License - v 2.0 - See Appendix Y --- ## The GNU General Public License (GPL) Version 2, June 1991 Copyright (C) 1989, 1991 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor Boston, MA 02110-1335 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed. See Appendix A END OF TERMS AND CONDITIONS How to Apply These Terms to Your New Programs If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms. To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found. One line to give the program's name and a brief idea of what it does. Copyright (C) This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details. You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1335 USA Also add information on how to contact you by electronic and paper mail. If the program is interactive, make it output a short notice like this when it starts in an interactive mode: Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details. The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		could even be mouse-clicks or menu items--whatever suits your program. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker. signature of Ty Coon, 1 April 1989 Ty Coon, President of Vice This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License. --- ## CLASSPATH EXCEPTION Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License version 2 cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version. ========== End License Reference [3] ========== ========== Start License Reference [4] ========== [The "BSD 3-clause license"] Copyright (c) 2012-2017 The ANTLR Project. All rights reserved. See Appendix M ===== MIT License for codepointat.js from https://git.io/codepointat MIT License for fromcodepoint.js from https://git.io/vDW1m Copyright Mathias Bynens See Appendix G ========== End License Reference [4] ========== == ========== Start License Reference [5] ========== Eclipse Public License - v 2.0 and Eclipse Distribution License - v 1.0 This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0, or the Eclipse Distribution License v. 1.0 which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: EPL-2.0 OR BSD-3-Clause Eclipse Public License - v 2.0 - See Appendix Y Eclipse Distribution License - v 1.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2007, Eclipse Foundation, Inc. and its licensors. All rights reserved. See Appendix M ========== End License Reference [5] ========== ==========Start of License Reference [6] ========== Per: https://www.eclipse.org/org/documents/epl-2.0/EPL-2.0.txt Eclipse Public License - v 2.0 - See Appendix Y ==========End of License Reference [6] ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-log4j2 2.7.4	Top Level Component Copyright: --- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== org.springframework.boot:spring-boot-starter-log4j2 License: Apache License Version 2.0 License: [0] Copyright: /* * Copyright 2012-2022 Pivotal, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");/ * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- NOTICE ---------- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== Fourth party Dependencies: org.springframework.boot spring-boot org.springframework.boot spring-boot-starter License : Apache License Version 2.0 [0] Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Notice: ---------- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== ========== Fourth-Party Dependencies org.springframework spring-aop org.springframework spring-context org.springframework spring-expression License : Apache License Version 2.0 [0] Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Notice: --- Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ========== Fourth party Dependencies: org.apache.logging.log4j:log4j-core License: Apache License, Version 2.0 Text of License: [0] Copyright 1999-2022 The Apache Software Foundation Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to You under the Apache license, Version 2.0 (the "License"); you may not use this file except in compliance with

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the license for the specific language governing permissions and limitations under the license. Apache Log4j Core Copyright 1999-2012 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell ========== Fourth party Dependencies: org.apache.logging.log4j:log4j-slf4j-impl org.apache.logging.log4j:log4j-api org.apache.logging.log4j:log4j-jul Common Copyright: License: Apache License, Version 2.0 Text of License: [0] Copyright 1999-2022 The Apache Software Foundation Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to You under the Apache license, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the license for the specific language governing permissions and limitations under the license. Notice: Apache Log4j Copyright 1999-2022 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma TimeoutBlockingWaitStrategy.java and parts of Util.java Copyright 2011 LMAX Ltd. ========== ========== Fourth-Party Dependencies org.slf4j:slf4j-api Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland) All rights reserved. License: MIT License See Appendix G ========== ========== Fourth-Party Dependencies jul-to-slf4j Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland) All rights reserved. License: MIT License See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== License References: ========== ========== ========== Start of Reference [0] ========== APACHE 2.0 - See Appendix E ========== End of Reference [0] ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-oauth2-client 2.5.5	TOP-LEVEL COPYRIGHT NOTICE for spring-boot-starter-oauth2-client 2.2.4.RELEASE © 2019 Pivotal Software, Inc. All Rights Reserved ---------separator--------- TOP-LEVEL LICENSE TEXT for spring-boot-starter-oauth2-client 2.2.4.RELEASE APACHE 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework.boot:spring-boot-starter:2.2.4.RELEASE FOURTH-PARTY DEPENDENCY #2 org.springframework.security:spring-security-config:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #3 org.springframework.security:spring-security-core:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #4 org.springframework.security:spring-security-oauth2-client:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #5 org.springframework.security:spring-security-oauth2-core:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #6 org.springframework.security:spring-security-web:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #7 org.springframework.security:spring-security-oauth2-jose:5.2.1.RELEASE COMMON COPYRIGHT NOTICES Copyright © 2020 Pivotal Software, Inc.. All rights reserved. COMMON LICENSE NOTICES Apache License, Version 2.0 Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT ---------separator--------- FOURTH-PARTY DEPENDENCY #8 org.springframework:spring-aop:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #9 org.springframework:spring-beans:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #10 org.springframework:spring-context:5.2.3.RELEASE

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #11 org.springframework:spring-core:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #12 org.springframework:spring-expression:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #13 org.springframework:spring-web:5.2.3.RELEASE COMMON COPY RIGHT TEXT © 2020 VMware, Inc. or its affiliates. Terms of Use • Privacy • Trademark Guidelines Apache®, Apache Tomcat®, Apache Kafka®, Apache Cassandra™, and Apache Geode™ are trademarks or registered trademarks of the Apache Software Foundation in the United States and/or other countries. Java™, Java™ SE, Java™ EE, and OpenJDK™ are trademarks of Oracle and/or its affiliates. Kubernetes® is a registered trademark of the Linux Foundation in the United States and other countries. Linux® is the registered trademark of Linus Torvalds in the United States and other countries. Windows® and Microsoft® Azure are registered trademarks of Microsoft Corporation. "AWS" and "Amazon Web Services" are trademarks or registered trademarks of Amazon.com Inc. or its affiliates. All other trademarks and copyrights are property of their respective owners and are only mentioned for informative purposes. Other names may be trademarks of their respective owners. COMMON LICENSE NOTICES Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT ---------separator--------- FOURTH-PARTY DEPENDENCY #14 com.nimbusds:oauth2-oidc-sdk:6.14 FOURTH-PARTY DEPENDENCY #15 com.nimbusds:lang-tag:1.4.4 FOURTH-PARTY DEPENDENCY #16 com.nimbusds:nimbus-jose-jwt:7.8 © 2020 Connect2id Ltd. EU VAT ID BG202911783 COMMON LICENSE NOTICES Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------separator--------- FOURTH-PARTY DEPENDENCY #17 net.minidev:json-smart:2.3 FOURTH-PARTY DEPENDENCY #18 net.minidev:accessors-smart:1.2 Copyright © XSERVER Inc. All Rights Reserved. COMMON LICENSE NOTICES Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT ---------separator--------- FOURTH-PARTY DEPENDENCY #19 com.github.stephenc.jcip:jcip-annotations:1.0-1 Copyright 2013 Stephen Connolly. COMMON LICENSE NOTICES Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT ---------separator--------- FOURTH-PARTY DEPENDENCY #20 com.sun.mail:jakarta.mail:1.6.4 Copyright (c) 1997, 2019 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0, which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception, which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 ---------separator--------- FOURTH-PARTY DEPENDENCY #21 com.sun.activation:jakarta.activation:1.2.1

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 1997, 2018 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Distribution License v. 1.0, which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: BSD-3-Clause #20 and #21 are Licensed under EPL 2.0, GPL2 w/ CPE , EDL 1.0 Lincese text is copied below. ---------separator---------- ---------EPL 2.0 text --------- EPL 2.0 - See Appendix Y ---------separator---------- --------- (GPL2 w/ CPE) GNU Classpath text--------- Classpath::License Classpath is distributed under the terms of the GNU General Public License with the following clarification and special exception. Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		As such, it can be used to run, create and distribute a large class of applications and applets. When GNU Classpath is used unmodified as the core class library for a virtual machine, compiler for the java languge, or for a program written in the java programming language it does not affect the licensing for distributing those programs directly. Classpath::Documentation Redistribution Policy GNU Documentation is unique because of our attitude towards it. We believe the reader should be free to copy and redistribute it, just like our software. Originally, all our documentation was released under a short Copyleft license, or under the GNU General Public License (GPL) itself; in 2001 the Free Documentation License (FDL) was created to address certain needs that were not met by licenses originally designed for software. ---------separator---------- --------- EDL 1.0 text--------- Eclipse Distribution License - v 1.0 Copyright (c) 2007, Eclipse Foundation, Inc. and its licensors. All rights reserved. See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #22 org.ow2.asm:asm:5.0.4 Licensed under BSD License ---------separator--------- ---------BSD License text--------- License ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-oauth2-client 2.2.4.RELEASE spring-boot-starter-oauth2-client 2.5.1.RELEASE spring-boot-starter-oauth2-client 2.6.7.RELEASE	TOP-LEVEL COPYRIGHT NOTICE for spring-boot-starter-oauth2-client 2.2.4.RELEASE © 2019 Pivotal Software, Inc. All Rights Reserved TOP-LEVEL LICENSE TEXT for spring-boot-starter-oauth2-client 2.2.4.RELEASE Apache License, Version 2.0 APACHE 2.0 - See Appendix E FOURTH-PARTY DEPENDENCY #1 org.springframework.boot:spring-boot-starter:2.2.4.RELEASE FOURTH-PARTY DEPENDENCY #2 org.springframework.security:spring-security-config:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #3 org.springframework.security:spring-security-core:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #4 org.springframework.security:spring-security-oauth2-client:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #5 org.springframework.security:spring-security-oauth2-core:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #6 org.springframework.security:spring-security-web:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #7 org.springframework.security:spring-security-oauth2-jose:5.2.1.RELEASE COMMON COPYRIGHT NOTICES Copyright © 2020 Pivotal Software, Inc.. All rights reserved. COMMON LICENSE NOTICES Apache License, Version 2.0 APACHE 2.0 - See Appendix E FOURTH-PARTY DEPENDENCY #8 org.springframework:spring-aop:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #9 org.springframework:spring-beans:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #10 org.springframework:spring-context:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #11 org.springframework:spring-core:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #12 org.springframework:spring-expression:5.2.3.RELEASE FOURTH-PARTY DEPENDENCY #13 org.springframework:spring-web:5.2.3.RELEASE COMMON COPY RIGHT TEXT © 2020 VMware, Inc. or its affiliates. Terms of Use • Privacy • Trademark Guidelines Apache®, Apache Tomcat®, Apache Kafka®, Apache Cassandra™, and Apache Geode™ are trademarks or registered trademarks of the Apache Software Foundation in the United States and/or other countries. Java™, Java™ SE, Java™ EE, and OpenJDK™ are trademarks of Oracle and/or its affiliates. Kubernetes® is a registered trademark of the Linux Foundation in the United States and other countries. Linux® is the registered trademark of Linus Torvalds in the United States and other countries. Windows® and Microsoft® Azure are registered trademarks of Microsoft Corporation. “AWS” and “Amazon Web Services” are trademarks or registered trademarks of Amazon.com Inc. or its affiliates. All other trademarks and copyrights are property of their

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		respective owners and are only mentioned for informative purposes. Other names may be trademarks of their respective owners. COMMON LICENSE NOTICES Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT FOURTH-PARTY DEPENDENCY #14 com.nimbusds:oauth2-oidc-sdk:6.14 FOURTH-PARTY DEPENDENCY #15 com.nimbusds:lang-tag:1.4.4 FOURTH-PARTY DEPENDENCY #16 com.nimbusds:nimbus-jose-jwt:7.8 © 2020 Connect2id Ltd. EU VAT ID BG202911783 COMMON LICENSE NOTICES Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT FOURTH-PARTY DEPENDENCY #17 net.minidev:json-smart:2.3 FOURTH-PARTY DEPENDENCY #18 net.minidev:accessors-smart:1.2 Copyright © XSERVER Inc. All Rights Reserved. COMMON LICENSE NOTICES Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT FOURTH-PARTY DEPENDENCY #19 com.github.stephenc.jcip:jcip-annotations:1.0-1 Copyright 2013 Stephen Connolly. COMMON LICENSE NOTICES Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT FOURTH-PARTY DEPENDENCY #20 com.sun.mail:jakarta.mail:1.6.4 Copyright (c) 1997, 2019 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0, which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception, which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 FOURTH-PARTY DEPENDENCY #21 com.sun.activation:jakarta.activation:1.2.1 Copyright (c) 1997, 2018 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Distribution License v. 1.0, which is available at http://www.eclipse.org/org/documents/edl-v10.php. SPDX-License-Identifier: BSD-3-Clause #20 and #21 are Licensed under EPL 2.0, GPL2 w/ CPE , EDL 1.0 Lincese text is copied below. EPL 2.0 - See Appendix Y (GPL2 w/ CPE) GNU Classpath text--------- Classpath::License Classpath is distributed under the terms of the GNU General Public License with the following clarification and special exception. Linking this library statically or dynamically with other modules is

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version. As such, it can be used to run, create and distribute a large class of applications and applets. When GNU Classpath is used unmodified as the core class library for a virtual machine, compiler for the java languge, or for a program written in the java programming language it does not affect the licensing for distributing those programs directly. Classpath::Documentation Redistribution Policy GNU Documentation is unique because of our attitude towards it. We believe the reader should be free to copy and redistribute it, just like our software. Originally, all our documentation was released under a short Copyleft license, or under the GNU General Public License (GPL) itself; in 2001 the Free Documentation License (FDL) was created to address certain needs that were not met by licenses originally designed for software. --------- EDL 1.0 text--------- Eclipse Distribution License - v 1.0 Copyright (c) 2007, Eclipse Foundation, Inc. and its licensors. All rights reserved. See Appendix M FOURTH-PARTY DEPENDENCY #22 org.ow2.asm:asm:5.0.4 <!-- ! ASM: a very small and fast Java bytecode manipulation framework ! Copyright (c) 2000-2011 INRIA, France Telecom ! All rights reserved. ! ! See Appendix M --> Licensed under BSD License License ASM is released under the following 3-Clause BSD License: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-oauth2-resource-server 2.5.5 spring-boot-starter-oauth2-resource-server 2.7.4	TOP-LEVEL COPYRIGHT NOTICE for spring-boot-starter-oauth2-resource-server 2.2.4.RELEASE © 2019 Pivotal Software, Inc. All Rights Reserved ---------separator--------- TOP-LEVEL LICENSE TEXT for spring-boot-starter-oauth2-resource-server 2.2.4.RELEASE APACHE 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework.boot:spring-boot-starter:2.2.4.RELEASE FOURTH-PARTY DEPENDENCY #2 org.springframework.security:spring-security-config:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #3 org.springframework.security:spring-security-core:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #4 org.springframework.security:spring-security-oauth2-resource-server:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #5 org.springframework.security:spring-security-core:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #6 org.springframework.security:spring-security-oauth2-core:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #7 org.springframework.security:spring-security-web:5.2.1.RELEASE FOURTH-PARTY DEPENDENCY #8 org.springframework.security:spring-security-oauth2-jose:5.2.1.RELEASE COMMON COPYRIGHT NOTICES Copyright © 2020 Pivotal Software, Inc.. All rights reserved. COMMON LICENSE NOTICES Apache License, Version 2.0 Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT ---------separator--------- FOURTH-PARTY DEPENDENCY #9 org.springframework:spring-core:5.2.3.RELEASE COMMON COPY RIGHT TEXT © 2020 VMware, Inc. or its affiliates. Terms of Use • Privacy • Trademark Guidelines

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Apache®, Apache Tomcat®, Apache Kafka®, Apache Cassandra™, and Apache Geode™ are trademarks or registered trademarks of the Apache Software Foundation in the United States and/or other countries. Java™, Java™ SE, Java™ EE, and OpenJDK™ are trademarks of Oracle and/or its affiliates. Kubernetes® is a registered trademark of the Linux Foundation in the United States and other countries. Linux® is the registered trademark of Linus Torvalds in the United States and other countries. Windows® and Microsoft® Azure are registered trademarks of Microsoft Corporation. "AWS" and "Amazon Web Services" are trademarks or registered trademarks of Amazon.com Inc. or its affiliates. All other trademarks and copyrights are property of their respective owners and are only mentioned for informative purposes. Other names may be trademarks of their respective owners. COMMON LICENSE NOTICES Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT ---------separator---------
Pivotal, Inc.	spring-security-web 5.7.5	APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-security-core 5.7.2	Top Level LT: Spring Security License: Apache 2.0 APACHE 2.0 - See Appendix E Notice: ========== == NOTICE file corresponding to section 4(d) of the Apache License, == == Version 2.0, in this case for the Spring Security distribution. == ========== The end-user documentation included with a redistribution, if any, must include the following acknowledgement: "This product includes software developed by Spring Security Project (https://www.springframework.org/security)." Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear. The names "Spring", "Spring Security", "Spring Security System", "SpringSource", "Acegi", "Acegi Security", "Acegi Security System", "Acegi" or any derivatives thereof may not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact ben.alex@springsource.com. ========== Fourth Party Dependencies: spring-security-core spring-security-crypto APACHE 2.0 - See Appendix E /* * Copyright 2022 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License");

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== ========= APACHE 2.0 - See Appendix E Fourth Party Dependencies: spring-aop spring-beans spring-context spring-core spring-jcl spring-expression APACHE 2.0 - See Appendix E Notice: Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ----

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

		SPRING FRAMEWORK ${version} SUBCOMPONENTS:
		Spring Framework ${version} includes a number of subcomponents
		with separate copyright notices and license terms. The product that
		includes this file does not necessarily use all the open source
		subcomponents referred to below. Your use of the source
		code for these subcomponents is subject to the terms and
		conditions of the following licenses.
		>>> ASM 7.3 (org.ow2.asm:asm:7.3, org.ow2.asm:asm-commons:7.3):
		Copyright (c) 2000-2011 INRIA, France Telecom
		All rights reserved.
		See Appendix M
		Copyright (c) 1999-2009, OW2 Consortium
		>>> CGLIB 3.3 (cglib:cglib:3.3):
		Per the LICENSE file in the CGLIB JAR distribution downloaded from
		https://github.com/cglib/cglib/releases/download/RELEASE_3_3_0/cglib-3.3.0.jar,
		CGLIB 3.3 is licensed under the Apache License, version 2.0, the text of which
		is included above.
		>>> Objenesis 3.1 (org.objenesis:objenesis:3.1):
		Per the LICENSE file in the Objenesis ZIP distribution downloaded from
		http://objenesis.org/download.html, Objenesis 3.1 is licensed under the
		Apache License, version 2.0, the text of which is included above.
		Per the NOTICE file in the Objenesis ZIP distribution downloaded from
		http://objenesis.org/download.html and corresponding to section 4d of the
		Apache License, Version 2.0, in this case for Objenesis:
		Objenesis
		Copyright 2006-2019 Joe Walnes, Henri Tremblay, Leonardo Mesquita
		==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		To the extent any open source components are licensed under the EPL and/or other similar licenses that require the source code and/or modifications to source code to be made available (as would be noted above), you may obtain a copy of the source code corresponding to the binaries for such open source components and modifications thereto, if any, (the "Source Files"), by downloading the Source Files from https://spring.io/projects, Pivotal's website at https://network.pivotal.io/open-source, or by sending a request, with your name and address to: Pivotal Software, Inc., 875 Howard Street, 5th floor, San Francisco, CA 94103, Attention: General Counsel. All such requests should clearly specify: OPEN SOURCE FILES REQUEST, Attention General Counsel. Pivotal can mail a copy of the Source Files to you on a CD or equivalent physical medium. This offer to obtain a copy of the Source Files is valid for three years from the date you acquired this Software product. Alternatively, the Source Files may accompany the Software. --- APACHE 2.0 - See Appendix E commons-logging Apache Commons Logging Copyright 2003-2016 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). -- com.fasterxml.jackson.annotation APACHE 2.0 - See Appendix E Copyright (c) 2020 Tatu Saloranta -- com.fasterxml.jackson.core APACHE 2.0 - See Appendix E # Jackson JSON processor

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 3.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. -- com.fasterxml.jackson.databind APACHE 2.0 - See Appendix E # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 3.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. --- aspectjweaver Eclipse Public License - v 1.0 Top Level LT: Spring Security

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		APACHE 2.0 - See Appendix E Notice: ========== == NOTICE file corresponding to section 4(d) of the Apache License, == == Version 2.0, in this case for the Spring Security distribution. == ========== The end-user documentation included with a redistribution, if any, must include the following acknowledgement: "This product includes software developed by Spring Security Project (https://www.springframework.org/security)." Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear. The names "Spring", "Spring Security", "Spring Security System", "SpringSource", "Acegi", "Acegi Security", "Acegi Security System", "Acegi" or any derivatives thereof may not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact ben.alex@springsource.com. ========== Fourth Party Dependencies: spring-security-core spring-security-crypto APACHE 2.0 - See Appendix E /* * Copyright 2022 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== ========== ======== APACHE 2.0 - See Appendix E Notice: ========== ========== == NOTICE file corresponding to section 4(d) of the Apache License, == == Version 2.0, in this case for the Spring Security distribution. == ========== ========== The end-user documentation included with a redistribution, if any, must include the following acknowledgement: "This product includes software developed by Spring Security Project (https://www.springframework.org/security)." Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear. The names "Spring", "Spring Security", "Spring Security System", "SpringSource", "Acegi", "Acegi Security", "Acegi Security System", "Acegi" or any derivatives thereof may not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact ben.alex@springsource.com.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== ======== Fourth Party Dependencies: spring-aop spring-beans spring-context spring-core spring-jcl spring-expression License: Apache 2.0 /* * Copyright 2002-2022 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Notice: Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

		these subcomponents is subject to the terms and conditions of the
		subcomponent's license, as noted in the license.txt file.
		--- 	
		SPRING FRAMEWORK ${version} SUBCOMPONENTS:
		Spring Framework ${version} includes a number of subcomponents
		with separate copyright notices and license terms. The product that
		includes this file does not necessarily use all the open source
		subcomponents referred to below. Your use of the source
		code for these subcomponents is subject to the terms and
		conditions of the following licenses.
		>>> ASM 7.3 (org.ow2.asm:asm:7.3, org.ow2.asm:asm-commons:7.3):
		Copyright (c) 2000-2011 INRIA, France Telecom
		All rights reserved.
		See Appendix M
		Copyright (c) 1999-2009, OW2 Consortium
		>>> CGLIB 3.3 (cglib:cglib:3.3):
		Per the LICENSE file in the CGLIB JAR distribution downloaded from
		https://github.com/cglib/cglib/releases/download/RELEASE_3_3_0/cglib-3.3.0.jar,
		CGLIB 3.3 is licensed under the Apache License, version 2.0, the text of which
		is included above.
		>>> Objenesis 3.1 (org.objenesis:objenesis:3.1):
		Per the LICENSE file in the Objenesis ZIP distribution downloaded from
		http://objenesis.org/download.html, Objenesis 3.1 is licensed under the
		Apache License, version 2.0, the text of which is included above.
		Per the NOTICE file in the Objenesis ZIP distribution downloaded from
		http://objenesis.org/download.html and corresponding to section 4d of the
		Apache License, Version 2.0, in this case for Objenesis:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Objenesis Copyright 2006-2019 Joe Walnes, Henri Tremblay, Leonardo Mesquita ========== ========== To the extent any open source components are licensed under the EPL and/or other similar licenses that require the source code and/or modifications to source code to be made available (as would be noted above), you may obtain a copy of the source code corresponding to the binaries for such open source components and modifications thereto, if any, (the "Source Files"), by downloading the Source Files from https://spring.io/projects, Pivotal's website at https://network.pivotal.io/open-source, or by sending a request, with your name and address to: Pivotal Software, Inc., 875 Howard Street, 5th floor, San Francisco, CA 94103, Attention: General Counsel. All such requests should clearly specify: OPEN SOURCE FILES REQUEST, Attention General Counsel. Pivotal can mail a copy of the Source Files to you on a CD or equivalent physical medium. This offer to obtain a copy of the Source Files is valid for three years from the date you acquired this Software product. Alternatively, the Source Files may accompany the Software. Apache 2.0 commons-logging Apache Commons Logging Copyright 2003-2016 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). -- com.fasterxml.jackson.annotation Apache 2.0 Copyright (c) 2020 Tatu Saloranta --

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		com.fasterxml.jackson.core ines (797 sloc) 31.2 KB Jackson JSON-processor. Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi Apache 2.0 # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 3.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. -- com.fasterxml.jackson.databind Copyright 2007-present the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright © 2012 fasterxml.com. All Rights Reserved. Apache 2.0 # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 3.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. --- aspectjweaver * Copyright (c) 1999-2001 Xerox Corporation, * 2002 Palo Alto Research Center, Incorporated (PARC). * All rights reserved. * This program and the accompanying materials are made available * under the terms of the Eclipse Public License v 2.0 * which accompanies this distribution and is available at * https://www.eclipse.org/org/documents/epl-2.0/EPL-2.0.txt Eclipse Public License - v 1.0 - See Appendix J Top Level LT: Spring Security License: Apache 2.0 Notice: ========== == NOTICE file corresponding to section 4(d) of the Apache License, == == Version 2.0, in this case for the Spring Security distribution. == ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The end-user documentation included with a redistribution, if any, must include the following acknowledgement: "This product includes software developed by Spring Security Project (https://www.springframework.org/security)." Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear. The names "Spring", "Spring Security", "Spring Security System", "SpringSource", "Acegi", "Acegi Security", "Acegi Security System", "Acegi" or any derivatives thereof may not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact ben.alex@springsource.com. ========== ========== ======== Fourth Party Dependencies: spring-security-core spring-security-crypto License: Apache 2.0 /* * Copyright 2022 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* limitations under the License. */ Apache License 2.0 - See Appendix E ========== ========== ======== ========== ========== ======== Notice: ========== ========== == NOTICE file corresponding to section 4(d) of the Apache License, == == Version 2.0, in this case for the Spring Security distribution. == ========== ========== The end-user documentation included with a redistribution, if any, must include the following acknowledgement: "This product includes software developed by Spring Security Project (https://www.springframework.org/security)." Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear. The names "Spring", "Spring Security", "Spring Security System", "SpringSource", "Acegi", "Acegi Security", "Acegi Security System", "Acegi" or any derivatives thereof may not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact ben.alex@springsource.com. ========== ========== ======== Fourth Party Dependencies: spring-aop spring-beans spring-context spring-core

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		spring-jcl spring-expression License: Apache 2.0 /* * Copyright 2002-2022 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Notice: Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ---- SPRING FRAMEWORK ${version} SUBCOMPONENTS: Spring Framework ${version} includes a number of subcomponents

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

		with separate copyright notices and license terms. The product that
		includes this file does not necessarily use all the open source
		subcomponents referred to below. Your use of the source
		code for these subcomponents is subject to the terms and
		conditions of the following licenses.
		
		>>> ASM 7.3 (org.ow2.asm:asm:7.3, org.ow2.asm:asm-commons:7.3):
		
		Copyright (c) 2000-2011 INRIA, France Telecom
		All rights reserved.
		
		See Appendix M
		
		Copyright (c) 1999-2009, OW2 Consortium
		
		>>> CGLIB 3.3 (cglib:cglib:3.3):
		
		Per the LICENSE file in the CGLIB JAR distribution downloaded from
		https://github.com/cglib/cglib/releases/download/RELEASE_3_3_0/cglib-3.3.0.jar,
		CGLIB 3.3 is licensed under the Apache License, version 2.0, the text of which
		is included above.
		
		>>> Objenesis 3.1 (org.objenesis:objenesis:3.1):
		
		Per the LICENSE file in the Objenesis ZIP distribution downloaded from
		http://objenesis.org/download.html, Objenesis 3.1 is licensed under the
		Apache License, version 2.0, the text of which is included above.
		
		Per the NOTICE file in the Objenesis ZIP distribution downloaded from
		http://objenesis.org/download.html and corresponding to section 4d of the
		Apache License, Version 2.0, in this case for Objenesis:
		
		Objenesis
		Copyright 2006-2019 Joe Walnes, Henri Tremblay, Leonardo Mesquita
		
		==========
		==========
		
		To the extent any open source components are licensed under the EPL and/or
		other similar licenses that require the source code and/or modifications to

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		source code to be made available (as would be noted above), you may obtain a copy of the source code corresponding to the binaries for such open source components and modifications thereto, if any, (the "Source Files"), by downloading the Source Files from https://spring.io/projects, Pivotal's website at https://network.pivotal.io/open-source, or by sending a request, with your name and address to: Pivotal Software, Inc., 875 Howard Street, 5th floor, San Francisco, CA 94103, Attention: General Counsel. All such requests should clearly specify: OPEN SOURCE FILES REQUEST, Attention General Counsel. Pivotal can mail a copy of the Source Files to you on a CD or equivalent physical medium. This offer to obtain a copy of the Source Files is valid for three years from the date you acquired this Software product. Alternatively, the Source Files may accompany the Software. --- Apache 2.0 commons-logging Apache Commons Logging Copyright 2003-2016 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). -- com.fasterxml.jackson.annotation Apache 2.0 Copyright (c) 2020 Tatu Saloranta -- com.fasterxml.jackson.core ines (797 sloc) 31.2 KB Jackson JSON-processor. Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi Apache 2.0 # Jackson JSON processor

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 3.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. -- com.fasterxml.jackson.databind Copyright 2007-present the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright © 2012 fasterxml.com. All Rights Reserved. Apache 2.0 # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 3.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. --- aspectjweaver * Copyright (c) 1999-2001 Xerox Corporation, * 2002 Palo Alto Research Center, Incorporated (PARC). * All rights reserved. * This program and the accompanying materials are made available * under the terms of the Eclipse Public License v 2.0 * which accompanies this distribution and is available at * https://www.eclipse.org/org/documents/epl-2.0/EPL-2.0.txt Eclipse Public License - v 1.0 - See Appendix J Top Level LT: Spring Security License: Apache 2.0 Notice: ========== ========== == NOTICE file corresponding to section 4(d) of the Apache License, == == Version 2.0, in this case for the Spring Security distribution. == ========== ========== The end-user documentation included with a redistribution, if any, must include the following acknowledgement: "This product includes software developed by Spring Security Project (https://www.springframework.org/security)."

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear. The names "Spring", "Spring Security", "Spring Security System", "SpringSource", "Acegi", "Acegi Security", "Acegi Security System", "Acegi" or any derivatives thereof may not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact ben.alex@springsource.com. ========== Fourth Party Dependencies: spring-security-core spring-security-crypto License: Apache 2.0 /* * Copyright 2022 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== Apache License 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== ========== ======== Notice: ========== ========== == NOTICE file corresponding to section 4(d) of the Apache License, == == Version 2.0, in this case for the Spring Security distribution. == ========== ========== The end-user documentation included with a redistribution, if any, must include the following acknowledgement: "This product includes software developed by Spring Security Project (https://www.springframework.org/security)." Alternately, this acknowledgement may appear in the software itself, if and wherever such third-party acknowledgements normally appear. The names "Spring", "Spring Security", "Spring Security System", "SpringSource", "Acegi", "Acegi Security", "Acegi Security System", "Acegi" or any derivatives thereof may not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact ben.alex@springsource.com. ========== ========== ======== Fourth Party Dependencies: spring-aop spring-beans spring-context spring-core spring-jcl spring-expression License: Apache 2.0 /* * Copyright 2002-2022 Pivotal Software, Inc.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Notice: Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ---- SPRING FRAMEWORK ${version} SUBCOMPONENTS: Spring Framework ${version} includes a number of subcomponents with separate copyright notices and license terms. The product that includes this file does not necessarily use all the open source subcomponents referred to below. Your use of the source

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

		code for these subcomponents is subject to the terms and
		conditions of the following licenses.
		
		>>> ASM 7.3 (org.ow2.asm:asm:7.3, org.ow2.asm:asm-commons:7.3):
		
		Copyright (c) 2000-2011 INRIA, France Telecom
		All rights reserved.
		
		See Appendix M
		
		Copyright (c) 1999-2009, OW2 Consortium
		
		>>> CGLIB 3.3 (cglib:cglib:3.3):
		
		Per the LICENSE file in the CGLIB JAR distribution downloaded from
		https://github.com/cglib/cglib/releases/download/RELEASE_3_3_0/cglib-3.3.0.jar,
		CGLIB 3.3 is licensed under the Apache License, version 2.0, the text of which
		is included above.
		
		>>> Objenesis 3.1 (org.objenesis:objenesis:3.1):
		
		Per the LICENSE file in the Objenesis ZIP distribution downloaded from
		http://objenesis.org/download.html, Objenesis 3.1 is licensed under the
		Apache License, version 2.0, the text of which is included above.
		
		Per the NOTICE file in the Objenesis ZIP distribution downloaded from
		http://objenesis.org/download.html and corresponding to section 4d of the
		Apache License, Version 2.0, in this case for Objenesis:
		
		Objenesis
		Copyright 2006-2019 Joe Walnes, Henri Tremblay, Leonardo Mesquita
		
		==========
		==========
		
		To the extent any open source components are licensed under the EPL and/or
		other similar licenses that require the source code and/or modifications to
		source code to be made available (as would be noted above), you may obtain a
		copy of the source code corresponding to the binaries for such open source
		components and modifications thereto, if any, (the "Source Files"), by

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		downloading the Source Files from https://spring.io/ projects, Pivotal's website at https://network.pivotal.io/open-source, or by sending a request, with your name and address to: Pivotal Software, Inc., 875 Howard Street, 5th floor, San Francisco, CA 94103, Attention: General Counsel. All such requests should clearly specify: OPEN SOURCE FILES REQUEST, Attention General Counsel. Pivotal can mail a copy of the Source Files to you on a CD or equivalent physical medium. This offer to obtain a copy of the Source Files is valid for three years from the date you acquired this Software product. Alternatively, the Source Files may accompany the Software. --- Apache 2.0 commons-logging Apache Commons Logging Copyright 2003-2016 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). -- com.fasterxml.jackson.annotation Apache 2.0 Copyright (c) 2020 Tatu Saloranta -- com.fasterxml.jackson.core ines (797 sloc) 31.2 KB Jackson JSON-processor. Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi Apache 2.0 # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		## Licensing Jackson 3.x core and extension components are licensed under Apache License 2.0 To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. -- com.fasterxml.jackson.databind Copyright 2007-present the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Copyright © 2012 fasterxml.com. All Rights Reserved. Apache 2.0 # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 3.x core and extension components are licensed under Apache License 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. --- aspectjweaver * Copyright (c) 1999-2001 Xerox Corporation, * 2002 Palo Alto Research Center, Incorporated (PARC). * All rights reserved. * This program and the accompanying materials are made available * under the terms of the Eclipse Public License v 2.0 * which accompanies this distribution and is available at * https://www.eclipse.org/org/documents/epl-2.0/EPL-2.0.txt * Eclipse Public License - v 1.0 - See Appendix J

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-test 2.7.4	Top Level LT: Spring boot APACHE 2.0 - See Appendix E ---------- Spring Boot Copyright (c) 2012-2020 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ---------- Copyright notices ---------- spring-boot-starter-test /* * Copyright 2012-2021 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- Fourth-party information ---------- The list of 4th party dependencies: 4TH PARTY DEPENDENCY #01- org.springframework.boot:spring-boot-test 4TH PARTY DEPENDENCY #02- org.springframework.boot:spring-boot-test-autoconfigure 4TH PARTY DEPENDENCY #03- org.springframework:spring-test 4TH PARTY DEPENDENCY #04- com.jayway.jsonpath:json-path

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		4TH PARTY DEPENDENCY #05-jakarta.xml.bind:jakarta.xml.bind-api 4TH PARTY DEPENDENCY #06-jakarta.activation:jakarta.activation-api 4TH PARTY DEPENDENCY #07-org.assertj:assertj-core 4TH PARTY DEPENDENCY #08-org.hamcrest:hamcrest 4TH PARTY DEPENDENCY #09-org.junit.jupiter:junit-jupiter 4TH PARTY DEPENDENCY #10-org.junit.jupiter:junit-jupiter-engine 4TH PARTY DEPENDENCY #11-org.junit.platform:junit-platform-engine 4TH PARTY DEPENDENCY #12-org.mockito:mockito-core 4TH PARTY DEPENDENCY #13-org.mockito:mockito-junit-jupiter 4TH PARTY DEPENDENCY #14-net.bytebuddy:byte-buddy 4TH PARTY DEPENDENCY #15-net.bytebuddy:byte-buddy-agent 4TH PARTY DEPENDENCY #16-org.objenesis:objenesis 4TH PARTY DEPENDENCY #17-org.skyscreamer:jsonassert 4TH PARTY DEPENDENCY #18-com.vaadin.external.google:android-json 4TH PARTY DEPENDENCY #19-org.xmlunit:xmlunit-core 4TH PARTY DEPENDENCY #20-org.springframework:spring-core 4TH PARTY DEPENDENCY #21-org.springframework.boot:spring-boot-starter 4TH PARTY DEPENDENCY #22-org.springframework.boot:spring-boot: 4TH PARTY DEPENDENCY #23-org.springframework:spring-context: 4TH PARTY DEPENDENCY #24-org.springframework:spring-aop: 4TH PARTY DEPENDENCY #25-org.springframework:spring-beans: 4TH PARTY DEPENDENCY #26-org.springframework:spring-expression: 4TH PARTY DEPENDENCY #27-org.springframework.boot:spring-boot-autoconfigure: 4TH PARTY DEPENDENCY #28-org.springframework.boot:spring-boot-starter-logging:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		4TH PARTY DEPENDENCY #29-ch.qos.logback:logback-classic: 4TH PARTY DEPENDENCY #30-ch.qos.logback:logback-core: 4TH PARTY DEPENDENCY #31-org.apache.logging.log4j:log4j-to-slf4j: 4TH PARTY DEPENDENCY #32-org.apache.logging.log4j:log4j-api: 4TH PARTY DEPENDENCY #33-org.slf4j:jul-to-slf4j: 4TH PARTY DEPENDENCY #34-jakarta.annotation:jakarta.annotation-api 4TH PARTY DEPENDENCY #35-org.yaml:snakeyaml: 4TH PARTY DEPENDENCY #36-net.minidev:json-smart: 4TH PARTY DEPENDENCY #37-net.minidev:accessors-smart: 4TH PARTY DEPENDENCY #38-org.ow2.asm:asm: 4TH PARTY DEPENDENCY #39-org.slf4j:slf4j-api: 4TH PARTY DEPENDENCY #40-org.junit.jupiter:junit-jupiter-api: 4TH PARTY DEPENDENCY #41-org.opentest4j:opentest4j: 4TH PARTY DEPENDENCY #42-org.junit.platform:junit-platform-commons: 4TH PARTY DEPENDENCY #43-org.apiguardian:apiguardian-api: 4TH PARTY DEPENDENCY #44-org.junit.jupiter:junit-jupiter-params: 4TH PARTY DEPENDENCY #45-org.springframework:spring-jcl ---------separator--------- 4TH PARTY DEPENDENCY #04-com.jayway.jsonpath:json-path License Type: Apache 2.0 /* * Copyright 2011 Kalle Stenflo * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- (separator)---------- 4TH PARTY DEPENDENCY #07-org.assertj:assertj-core /* * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with * the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on * an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the * specific language governing permissions and limitations under the License. * * Copyright 2012-2022 Joel Costigliola */ --- (separator)---------- 4TH PARTY DEPENDENCY #14-net.bytebuddy:byte-buddy 4TH PARTY DEPENDENCY #15-net.bytebuddy:byte-buddy-agent Copyright 2022 Rafael Winterhalter Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M This product bundles ASM ${version.asm}, which is available under a "3-clause BSD" license. For details, see licenses/ASM. For more information visit ${asm.url}. ---------- (separator)---------- 4TH PARTY DEPENDENCY #16-org.objenesis:objenesis Copyright 2006-2022 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- (separator)---------- 4TH PARTY DEPENDENCY #17-org.skyscreamer:jsonassert Copyright 2022 Carter Page Licensed under the Apache License, Version 2.0 (the "License");

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- (separator)---------- 4TH PARTY DEPENDENCY #18-com.vaadin.external.google:android-json Copyright 2022 Google Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- (separator)---------- 4TH PARTY DEPENDENCY #19-org.xmlunit:xmlunit-core Copyright 2022 XMLUnit Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- (separator)---------- 4TH PARTY DEPENDENCY #05-jakarta.xml.bind:jakarta.xml.bind-api 4TH PARTY DEPENDENCY #06-jakarta.activation:jakarta.activation-api == License Type Eclipse Public License v. 2.0 - (Secondary) GNU General Public License, version 2 with the GNU Classpath Exception == Copyright Notices Common copyright notice for above dependencies - Copyright (c) 2012, 2018 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0, which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception, which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Oracle elects the EPL. --- (separator)---------- 4TH PARTY DEPENDENCY #09-org.junit.jupiter:junit-jupiter

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		4TH PARTY DEPENDENCY #10-org.junit.jupiter:junit-jupiter-engine 4TH PARTY DEPENDENCY #11-org.junit.platform:junit-platform-engine == License Type Eclipse Public License v. 2.0 == Copyright Notices Common copyright notice for above dependencies - Copyright (c) 2012, 2018 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0, which is available at http://www.eclipse.org/legal/epl-2.0. --- (separator)---------- 4TH PARTY DEPENDENCY #40-org.junit.jupiter:junit-jupiter-api: 4TH PARTY DEPENDENCY #42-org.junit.platform:junit-platform-commons: 4TH PARTY DEPENDENCY #44-org.junit.jupiter:junit-jupiter-params: == License Type Eclipse Public License v. 2.0 == Copyright Notices /* * Copyright 2015-2022 the original author or authors. * * All rights reserved. This program and the accompanying materials are * made available under the terms of the Eclipse Public License v2.0 which * accompanies this distribution and is available at * * https://www.eclipse.org/legal/epl-v20.html */ --- (separator)---------- 4TH PARTY DEPENDENCY #08-org.hamcrest:hamcrest == License Type BSD License

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		== Copyright Notices Common copyright notice for above dependencies - Copyright (c) 2000-2015 www.hamcrest.org All rights reserved. See Appendix M ---------- (separator)---------- 4TH PARTY DEPENDENCY #12-org.mockito:mockito-core 4TH PARTY DEPENDENCY #13-org.mockito:mockito-junit-jupiter == License Type The MIT License == Copyright Notices Common copyright notice for above dependencies - The MIT License Copyright (c) 2007 Mockito contributors See Appendix G ---------- (separator)---------- 4TH PARTY DEPENDENCY #21-org.springframework.boot:spring-boot-starter 4TH PARTY DEPENDENCY #22-org.springframework.boot:spring-boot: 4TH PARTY DEPENDENCY #27-org.springframework.boot:spring-boot-autoconfigure: 4TH PARTY DEPENDENCY #28-org.springframework.boot:spring-boot-starter-logging: 4TH PARTY DEPENDENCY #01-org.springframework.boot:spring-boot-test 4TH PARTY DEPENDENCY #02-org.springframework.boot:spring-boot-test-autoconfigure License: Apache License 2.0 /* * Copyright 2012-2021 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ---------- (separator)---------- 4TH PARTY DEPENDENCY #23- org.springframework:spring-context: 4TH PARTY DEPENDENCY #24- org.springframework:spring-aop: 4TH PARTY DEPENDENCY #25- org.springframework:spring-beans: 4TH PARTY DEPENDENCY #26- org.springframework:spring-expression: 4TH PARTY DEPENDENCY #45- org.springframework:spring-jcl: 4TH PARTY DEPENDENCY #03- org.springframework:spring-test 4TH PARTY DEPENDENCY #20- org.springframework:spring-core License: Apache License 2.0 /* * Copyright 2002-2021 Juergen Hoeller * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. -------------------------------- (separator)-------------------------------- 4TH PARTY DEPENDENCY #29- ch.qos.logback:logback-classic: 4TH PARTY DEPENDENCY #30- ch.qos.logback:logback-core: logback:logback-core Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2015, QOS.ch. All rights reserved. This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. Oracle elects the EPL.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- - logback:logback-classic LOGBack: the reliable, fast and flexible logging library for Java. Copyright (C) 1999-2005, QOS.ch, LOGBack.com This library is free software, you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation. ---------- - License: Logback LICENSE ---------- Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2015, QOS.ch. All rights reserved. This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. ---------- (separator)---------- 4TH PARTY DEPENDENCY #31- org.apache.logging.log4j:log4j-to-slf4j: License: Apache License Apache Log4j Copyright 1999-2019 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma ---------- (separator)---------- 4TH PARTY DEPENDENCY #32-org.apache.logging.log4j:log4j-api: License: Apache License, Version 2.0 Copyright: ========== Apache Log4j API Copyright 1999-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ---------- (separator)---------- 4TH PARTY DEPENDENCY #33-org.slf4j:jul-to-slf4j: 4TH PARTY DEPENDENCY #39-org.slf4j:slf4j-api: License: MIT License Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G ---------- (separator)---------- 4TH PARTY DEPENDENCY #34-jakarta.annotation:jakarta.annotation-api License: Eclipse Public License Version 2.0 + GPL2 w/ CPE Copyright: ========== Text of Copyright Copyright (c) 2012, 2021 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0, which is available at http://www.eclipse.org/legal/epl-2.0.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception, which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Oracle elects the EPL. All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ---------- (separator)---------- 4TH PARTY DEPENDENCY #35-org.yaml:snakeyaml: License: Apache License Version 2.0 Copyright: ========== ========== Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- (separator)---------- 4TH PARTY DEPENDENCY #36-net.minidev:json-smart: 4TH PARTY DEPENDENCY #37-net.minidev:accessors-smart:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		License : Apache License 2.0 /* * Copyright 2011 JSON-SMART authors * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- (separator)---------- 4TH PARTY DEPENDENCY #38-org.ow2.asm:asm: ASM: a very small and fast Java bytecode manipulation framework Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M --- (separator)---------- 4TH PARTY DEPENDENCY #41-org.opentest4j:opentest4j: /* * Copyright 2015-2018 Stefan Bechtold * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- (separator)---------- 4TH PARTY DEPENDENCY #43-org.apiguardian:apiguardian-api: /* * Copyright 2002-2017 @API Guardian Team * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- (separator)---------- == LICENSES == Text of license (license name) APACHE 2.0 - See Appendix E GNU General Public License, Version 2 (GPL-2.0) - See Appendix A == Text of license (license name) Classpath::License

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Classpath is distributed under the terms of the GNU General Public License with the following clarification and special exception. Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version. As such, it can be used to run, create and distribute a large class of applications and applets. When GNU Classpath is used unmodified as the core class library for a virtual machine, compiler for the java languge, or for a program written in the java programming language it does not affect the licensing for distributing those programs directly. ---------- logback:logback-core ---------- Eclipse Public License - v 1.0, see Appendix J

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-undertow 2.7.4	Top Level Component Copyright: ========== Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== spring-boot-starter-undertow /* * Copyright 2012-2019 Pivotal Software, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION Appendix E END OF TERMS AND CONDITIONS Copyright [yyyy] [name of copyright owner]

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Fourth Party Dependencies: undertow-core undertow-servlet undertow-websockets-jsr Common License : Apache License 2.0 Copyright: /* * JBoss, Home of Professional Open Source. * Copyright 2014 Red Hat, Inc., and individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		/ --- Fourth Party Dependencies: jboss-logging jboss-threads xnio-api Common License : Apache License 2.0 Copyright: / * JBoss, Home of Professional Open Source. * Copyright 2014 Red Hat, Inc., and individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- --- wildfly-common wildfly-client-config Common License : Apache License 2.0 ========== ========== Copyright: wildfly-common /* * JBoss, Home of Professional Open Source. * Copyright 2017 Red Hat, Inc., and individual contributors

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ========== Copyright: wildfly-client-config /* * JBoss, Home of Professional Open Source. * Copyright 2015 Red Hat, Inc., and individual contributors * as indicated by the @author tags. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		/ --- --- jakarta.servlet-api jakarta.websocket-api License: EPL 2.0 with GPL2 w/ CPE Copyright: / * Copyright (c) 2017, 2018 Oracle and/or its affiliates and others. * All rights reserved. * * This program and the accompanying materials are made available under the * terms of the Eclipse Public License v. 2.0, which is available at * http://www.eclipse.org/legal/epl-2.0. * * This Source Code may also be made available under the following Secondary * Licenses when the conditions for such availability set forth in the * Eclipse Public License v. 2.0 are satisfied: GNU General Public License, * version 2 with the GNU Classpath Exception, which is available at * https://www.gnu.org/software/classpath/license.html. * * SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 */ Notice: --- # Notices for Eclipse Project for Servlet This content is produced and maintained by the Eclipse Project for Servlet project. * Project home: https://projects.eclipse.org/projects/ee4j.servlet ## Trademarks Eclipse Project for Servlet is a trademark of the Eclipse Foundation. ## Copyright

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. Portions of this program and the accompanying materials are made available under the terms of the Apache License, version 2.0 which is available at https://www.apache.org/licenses/LICENSE-2.0. SPDX-License-Identifier: (EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0) AND Apache-2.0 ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/servlet-api ## Third-party Content ## Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ---------- # Notices for Jakarta WebSocket

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		This content is produced and maintained by the Jakarta WebSocket project. * Project home: https://projects.eclipse.org/projects/ee4j.websocket ## Trademarks Jakarta WebSocket is a trademark of the Eclipse Foundation. ## Copyright All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/websocket-api ## Third-party Content This project leverages the following third party content. None ## Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. --- EPL-2.0 with secondary license GPL-2.0 WITH Classpath-exception --- Eclipse Public License - v 2.0 - See Appendix Y --- --- The GNU General Public License (GPL) Version 2, June 1991 Copyright (C) 1989, 1991 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed. See Appendix A END OF TERMS AND CONDITIONS How to Apply These Terms to Your New Programs If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms. To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found. One line to give the program's name and a brief idea of what it does. Copyright (C) This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Software Foundation; either version 2 of the License, or (at your option) any later version. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details. You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Also add information on how to contact you by electronic and paper mail. If the program is interactive, make it output a short notice like this when it starts in an interactive mode: Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type 'show w'. This is free software, and you are welcome to redistribute it under certain conditions; type 'show c' for details. The hypothetical commands 'show w' and 'show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than 'show w' and 'show c'; they could even be mouse-clicks or menu items--whatever suits your program. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the program 'Gnomovision' (which makes passes at compilers) written by James Hacker. signature of Ty Coon, 1 April 1989

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Ty Coon, President of Vice This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License. "CLASSPATH" EXCEPTION TO THE GPL Certain source files distributed by Oracle America and/or its affiliates are subject to the following clarification and special exception to the GPL, but only where Oracle has expressly included in the particular source file's header the words "Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code." Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		--- --- tomcat-embed-el License: Apache License Version 2.0 Copyright: Apache Tomcat Copyright 1999-2022 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). This software contains code derived from netty-native developed by the Netty project (https://netty.io, https://github.com/netty/netty-tcnative/) and from finagle-native developed at Twitter (https://github.com/twitter/finagle). This software contains code derived from jgroups-kubernetes developed by the JGroups project (http://www.jgroups.org/). Java compilation software for JSP pages is provided by the Eclipse JDT Core Batch Compiler component, which is open source software. The original software and related information is available at https://www.eclipse.org/jdt/core/. org.apache.tomcat.util.json.JSONParser.jj is a public domain javacc grammar for JSON written by Robert Fischer. https://github.com/RobertFischer/json-parser For portions of the Tomcat JNI OpenSSL API and the OpenSSL JSSE integration The org.apache.tomcat.jni and the org.apache.tomcat.net.openssl packages are derivative work originating from the Netty project and the finagle-native project developed at Twitter * Copyright 2014 The Netty Project * Copyright 2014 Twitter For portions of the Tomcat cloud support The org.apache.catalina.tribes.membership.cloud package contains derivative work originating from the jgroups project. https://github.com/jgroups-extras/jgroups-kubernetes

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2002-2018 Red Hat Inc. The original XML Schemas for Java EE Deployment Descriptors: - javaee_5.xsd - javaee_web_services_1_2.xsd - javaee_web_services_client_1_2.xsd - javaee_6.xsd - javaee_web_services_1_3.xsd - javaee_web_services_client_1_3.xsd - jsp_2_2.xsd - web-app_3_0.xsd - web-common_3_0.xsd - web-fragment_3_0.xsd - javaee_7.xsd - javaee_web_services_1_4.xsd - javaee_web_services_client_1_4.xsd - jsp_2_3.xsd - web-app_3_1.xsd - web-common_3_1.xsd - web-fragment_3_1.xsd - javaee_8.xsd - web-app_4_0.xsd - web-common_4_0.xsd - web-fragment_4_0.xsd maybe obtained from: http://www.oracle.com/webfolder/technetwork/jsc/xml/ns/javaee/index.html ---------- org.springframework.boot spring-boot org.springframework.boot spring-boot-starter License : Apache License Version 2.0 Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --------- Notice: --------- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ---------- org.springframework spring-context org.springframework spring-expression org.springframework spring-aop License : Apache License Version 2.0 Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --------- Notice: --------- Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		(the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-webflux 2.7.4	Top-Level Component Copyright: --- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== org.springframework.boot:spring-boot-starter-webflux: License: Apache License Version 2.0 Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. License text : [0] in License reference. ---------- NOTICE ---------- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== Fourth-Party Dependencies org.springframework.boot spring-boot

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.springframework.boot spring-boot-autoconfigure org.springframework.boot spring-boot-starter org.springframework.boot spring-boot-starter-json org.springframework.boot spring-boot-starter-logging org.springframework.boot spring-boot-starter-reactor-netty org.springframework.boot spring-boot-starter-webflux Common Copyright: License : Apache License Version 2.0 License text : [0] in License reference. Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Notices: --- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. --- ========== ========== ========== Fourth-Party Dependencies org.springframework spring-aop org.springframework spring-beans org.springframework spring-context

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.springframework spring-core org.springframework spring-expression org.springframework spring-jcl org.springframework spring-web Common Copyright: License : Apache License Version 2.0 License text : [0] in License reference. Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Notices: --- Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. --- ========== ========== ========== Fourth-Party Dependencies

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.apache.logging.log4j log4j-api org.apache.logging.log4j log4j-to-slf4j License : Apache License Version 2.0 [0] Common Copyright Notice Copyright 1999-2022 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Apache Log4j Copyright 1999-2019 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma TimeoutBlockingWaitStrategy.java and parts of Util.java Copyright 2011 LMAX Ltd. ========== Fourth-Party Dependencies ch.qos.logback logback-classic

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		ch.qos.logback logback-core License : GNU Lesser General Public License version 2.1, Eclipse Public License v1.0 Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2017, QOS.ch. All rights reserved. This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. License text : [1], [2] in License reference. Oracle elects the EPL. ========== Fourth-Party Dependencies org.slf4j:slf4j-api Copyright (c) 2004-2017 QOS.ch All rights reserved. License: MIT License See Appendix G ========== Fourth-Party Dependencies jul-to-slf4j Copyright (c) 2004-2017 QOS.ch All rights reserved. License: MIT License See Appendix G ========== Fourth-Party Dependencies jakarta.annotation:jakarta.annotation-api License: Eclipse Public License Version 2.0 + GPL2 w/ CPE [3]

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright: Text of Copyright Copyright (c) 2012, 2021 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0, which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception, which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. ---------- # Notices for Jakarta Annotations This content is produced and maintained by the Jakarta Annotations project. * Project home: https://projects.eclipse.org/projects/ee4j.ca ## Trademarks Jakarta Annotations is a trademark of the Eclipse Foundation. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Oracle elects the EPL -2.0 ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/common-annotations-api ## Third-party Content ## Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ========== ========== ========== Fourth-Party Dependencies org.yaml snakeyaml License : Apache License Version 2.0 License text : [0] in License reference. Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== ========== Fourth-Party Dependencies com.fasterxml.jackson.core jackson-annotations com.fasterxml.jackson.core jackson-core com.fasterxml.jackson.core jackson-databind com.fasterxml.jackson.datatype jackson-datatype-jdk8 com.fasterxml.jackson.datatype jackson-datatype-jsr310 com.fasterxml.jackson.module jackson-module-parameter-names License : Apache License Version 2.0 [0] Common copyright notice: Copyright (c) 2019 Tatu Saloranta This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ---------- Notice: # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 2.x core and extension components are licensed under Apache License 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS(-2.x) file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ========== Fourth-Party Dependencies io.netty netty-buffer io.netty netty-codec io.netty netty-codec-dns io.netty netty-codec-http io.netty netty-codec-http2 io.netty netty-codec-socks io.netty netty-common io.netty netty-handler io.netty netty-handler-proxy io.netty netty-resolver io.netty netty-resolver-dns io.netty netty-resolver-dns-classes-macos io.netty netty-resolver-dns-native-macos io.netty netty-transport io.netty netty-transport-classes-epoll io.netty netty-transport-native-epoll io.netty netty-transport-native-unix-common License : Apache License Version 2.0 License text : [0] in License reference. Copyright 2011 The Netty Project The Netty Project licenses this file to you under the Apache License, version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Also, please refer to each LICENSE..txt file, which is located in the 'license' directory of the distribution file, for the license terms of the components that this product depends on. ---------- --- Notice: The Netty Project ========== Please visit the Netty web site for more information: * https://netty.io/ Copyright 2014 The Netty Project The Netty Project licenses this file to you under the Apache License, version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at: https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Also, please refer to each LICENSE..txt file, which is located in the 'license' directory of the distribution file, for the license terms of the components that this product depends on. ---------- ---- This product contains the extensions to Java Collections Framework which has been derived from the works by JSR-166 EG, Doug Lea, and Jason T. Greene:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* LICENSE: * license/LICENSE.jsr166y.txt (Public Domain) The person or persons who have associated work with this document (the "Dedicator" or "Certifier") hereby either (a) certifies that, to the best of his knowledge, the work of authorship identified is in the public domain of the country from which the work is published, or (b) hereby dedicates whatever copyright the dedicators holds in the work of authorship identified below (the "Work") to the public domain. A certifier, moreover, dedicates any copyright interest he may have in the associated work, and for these purposes, is described as a "dedicator" below. A certifier has taken reasonable steps to verify the copyright status of this work. Certifier recognizes that his good faith efforts may not shield him from liability if in fact the work certified is not in the public domain. Dedicator makes this dedication for the benefit of the public at large and to the detriment of the Dedicator's heirs and successors. Dedicator intends this dedication to be an overt act of relinquishment in perpetuity of all present and future rights under copyright law, whether vested or contingent, in the Work. Dedicator understands that such relinquishment of all rights includes the relinquishment of all rights to enforce (by lawsuit or otherwise) those copyrights in the Work. Dedicator recognizes that, once placed in the public domain, the Work may be freely reproduced, distributed, transmitted, used, modified, built upon, or otherwise exploited by anyone for any purpose, commercial or non-commercial, and in any way, including by methods that have not yet been invented or conceived. * HOMEPAGE: * http://gee.cs.oswego.edu/cgi-bin/viewcvs.cgi/jsr166/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* http://viewvc.jboss.org/cgi-bin/viewvc.cgi/jbosscache/experimental/jsr166/ --- This product contains a modified version of Robert Harder's Public Domain Base64 Encoder and Decoder, which can be obtained at: * LICENSE: * license/LICENSE.base64.txt (Public Domain) The person or persons who have associated work with this document (the "Dedicator" or "Certifier") hereby either (a) certifies that, to the best of his knowledge, the work of authorship identified is in the public domain of the country from which the work is published, or (b) hereby dedicates whatever copyright the dedicators holds in the work of authorship identified below (the "Work") to the public domain. A certifier, moreover, dedicates any copyright interest he may have in the associated work, and for these purposes, is described as a "dedicator" below. A certifier has taken reasonable steps to verify the copyright status of this work. Certifier recognizes that his good faith efforts may not shield him from liability if in fact the work certified is not in the public domain. Dedicator makes this dedication for the benefit of the public at large and to the detriment of the Dedicator's heirs and successors. Dedicator intends this dedication to be an overt act of relinquishment in perpetuity of all present and future rights under copyright law, whether vested or contingent, in the Work. Dedicator understands that such relinquishment of all rights includes the relinquishment of all rights to enforce (by lawsuit or otherwise) those copyrights in the Work. Dedicator recognizes that, once placed in the public domain, the Work may be

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		freely reproduced, distributed, transmitted, used, modified, built upon, or otherwise exploited by anyone for any purpose, commercial or non-commercial, and in any way, including by methods that have not yet been invented or conceived. * HOMEPAGE: * http://iharder.sourceforge.net/current/java/base64/ ---------- This product contains a modified portion of 'Webbit', an event based WebSocket and HTTP server, which can be obtained at: * LICENSE: * license/LICENSE.webbit.txt (BSD License) (BSD License: https://www.opensource.org/licenses/bsd-license) Copyright (c) 2011, Joe Walnes, Aslak Hellesøy and contributors All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. * Neither the name of the Webbit nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. * HOMEPAGE: * https://github.com/joewalnes/webbit ---------- This product contains a modified portion of 'SLF4J', a simple logging facade for Java, which can be obtained at: * LICENSE: * license/LICENSE.slf4j.txt (MIT License) /* * Copyright (c) 2004-2007 QOS.ch * All rights reserved. * See Appendix G */ * HOMEPAGE: * https://www.slf4j.org/ ---------- This product contains a modified portion of 'Apache Harmony', an open source Java SE, which can be obtained at: * NOTICE: * license/NOTICE.harmony.txt Apache Harmony

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2006, 2010 The Apache Software Foundation. This product includes software developed at The Apache Software Foundation (https://www.apache.org/). * LICENSE: * license/LICENSE.harmony.txt (Apache License 2.0) * HOMEPAGE: * https://archive.apache.org/dist/harmony/ --- This product contains a modified portion of 'jbzip2', a Java bzip2 compression and decompression library written by Matthew J. Francis. It can be obtained at: * LICENSE: * license/LICENSE.jbzip2.txt (MIT License) Copyright (c) 2010-2011 Matthew J. Francis and Contributors of the jbzip2 Project See Appendix G * HOMEPAGE: * https://code.google.com/p/jbzip2/ --- This product contains a modified portion of 'libdivsufsort', a C API library to construct the suffix array and the Burrows-Wheeler transformed string for any input string of a constant-size alphabet written by Yuta Mori. It can be obtained at: * LICENSE: * license/LICENSE.libdivsufsort.txt (MIT License) Copyright (c) 2003-2008 Yuta Mori All Rights Reserved. See Appendix G * HOMEPAGE: * https://github.com/y-256/libdivsufsort --- This product contains a modified portion of Nitsan Wakart's 'JCTools', Java Concurrency Tools for the JVM, which can be obtained at: * LICENSE: * license/LICENSE.jctools.txt (ASL2 License) * HOMEPAGE: * https://github.com/JCTools/JCTools

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		--- --- This product optionally depends on 'JZlib', a re-implementation of zlib in pure Java, which can be obtained at: * LICENSE: * license/LICENSE.jzlib.txt (BSD style License) Copyright (c) 2000,2001,2002,2003,2004 ymnk, JCraft,Inc. All rights reserved. See Appendix M * HOMEPAGE: * http://www.jcraft.com/jzlib/ --- --- This product optionally depends on 'Compress-LZF', a Java library for encoding and decoding data in LZF format, written by Tatu Saloranta. It can be obtained at: * LICENSE: * license/LICENSE.compress-lzf.txt (Apache License 2.0) Copyright 2009-2010 Ning, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS,WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. * HOMEPAGE: * https://github.com/ning/compress --- --- This product optionally depends on 'lz4', a LZ4 Java compression and decompression library written by Adrien Grand. It can be obtained at: * LICENSE:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* license/LICENSE.lz4.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jpountz/lz4-java --- This product optionally depends on 'lzma-java', a LZMA Java compression and decompression library, which can be obtained at: * LICENSE: * license/LICENSE.lzma-java.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jponge/lzma-java --- This product optionally depends on 'zstd-jni', a zstd-jni Java compression and decompression library, which can be obtained at: * LICENSE: * license/LICENSE.zstd-jni.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/luben/zstd-jni --- This product contains a modified portion of 'jfastlz', a Java port of FastLZ compression and decompression library written by William Kinney. It can be obtained at: * LICENSE: * license/LICENSE.jfastlz.txt (MIT License) The MIT License Copyright (c) 2009 William Kinney See Appendix G * HOMEPAGE: * https://code.google.com/p/jfastlz/ --- This product contains a modified portion of and optionally depends on 'Protocol Buffers', Google's data interchange format, which can be obtained at: * LICENSE: * license/LICENSE.protobuf.txt (New BSD License) Protocol Buffers - Google's data interchange format Copyright 2013 Google Inc. All rights reserved. https://developers.google.com/protocol-buffers/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See Appendix M Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license. * HOMEPAGE: * https://github.com/google/protobuf --- This product optionally depends on 'Bouncy Castle Crypto APIs' to generate a temporary self-signed X.509 certificate when the JVM does not provide the equivalent functionality. It can be obtained at: * LICENSE: * license/LICENSE.bouncycastle.txt (MIT License) The MIT License (MIT) Copyright (c) 2000 - 2013 The Legion of the Bouncy Castle Inc. (https://www.bouncycastle.org) See Appendix G * HOMEPAGE: * https://www.bouncycastle.org/ --- This product optionally depends on 'Snappy', a compression library produced by Google Inc, which can be obtained at: * LICENSE: * license/LICENSE.snappy.txt (New BSD License) Copyright 2011, Google Inc. All rights reserved. See Appendix M * HOMEPAGE: * https://github.com/google/snappy --- This product optionally depends on 'JBoss Marshalling', an alternative Java serialization API, which can be obtained at: * LICENSE:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* license/LICENSE.jboss-marshalling.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jboss-remoting/jboss-marshalling --- This product optionally depends on 'Caliper', Google's micro- benchmarking framework, which can be obtained at: * LICENSE: * license/LICENSE.caliper.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/google/caliper --- This product optionally depends on 'Apache Commons Logging', a logging framework, which can be obtained at: * LICENSE: * license/LICENSE.commons-logging.txt (Apache License 2.0) * HOMEPAGE: * https://commons.apache.org/logging/ --- This product optionally depends on 'Apache Log4J', a logging framework, which can be obtained at: * LICENSE: * license/LICENSE.log4j.txt (Apache License 2.0) * HOMEPAGE: * https://logging.apache.org/log4j/ --- This product optionally depends on 'Aalto XML', an ultra-high performance non-blocking XML processor, which can be obtained at: * LICENSE: * license/LICENSE.aalto-xml.txt (Apache License 2.0) This copy of Aalto XML processor is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		https://www.apache.org/licenses/ A copy is also included with both the the downloadable source code package and jar that contains class bytecodes, as file "ASL 2.0". In both cases, that file should be located next to this file: in source distribution the location should be "release-notes/asl"; and in jar "META-INF/" * HOMEPAGE: * http://wiki.fasterxml.com/AaltoHome --- This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Twitter. It can be obtained at: * LICENSE: * license/LICENSE.hpack.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/twitter/hpack --- This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Cory Benfield. It can be obtained at: * LICENSE: * license/LICENSE.hyper-hpack.txt (MIT License) The MIT License (MIT) Copyright (c) 2014 Cory Benfield See Appendix G * HOMEPAGE: * https://github.com/python-hyper/hpack/ --- This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Tatsuhiro Tsujikawa. It can be obtained at: * LICENSE: * license/LICENSE.nghttp2-hpack.txt (MIT License) The MIT License Copyright (c) 2012, 2014, 2015, 2016 Tatsuhiro Tsujikawa

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2012, 2014, 2015, 2016 nghttp2 contributors See Appendix G * HOMEPAGE: * https://github.com/nghttp2/nghttp2/ --- This product contains a modified portion of 'Apache Commons Lang', a Java library provides utilities for the java.lang API, which can be obtained at: * LICENSE: * license/LICENSE.commons-lang.txt (Apache License 2.0) * HOMEPAGE: * https://commons.apache.org/proper/commons-lang/ --- This product contains the Maven wrapper scripts from 'Maven Wrapper', that provides an easy way to ensure a user has everything necessary to run the Maven build. * LICENSE: * license/LICENSE.mvn-wrapper.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/takari/maven-wrapper --- This product contains the dnsinfo.h header file, that provides a way to retrieve the system DNS configuration on MacOS. This private header is also used by Apple's open source mDNSResponder (https://opensource.apple.com/tarballs/mDNSResponder/). * LICENSE: * license/LICENSE.dnsinfo.txt (Apple Public Source License 2.0) /* * Copyright (c) 2004-2006, 2008, 2009, 2011 Apple Inc. All rights reserved. * * @APPLE_LICENSE_HEADER_START@ * * This file contains Original Code and/or Modifications of Original Code

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* as defined in and that are subject to the Apple Public Source License * Version 2.0 (the 'License'). You may not use this file except in * compliance with the License. Please obtain a copy of the License at * https://www.opensource.apple.com/apsl/ and read it before using this * file. * * The Original Code and all software distributed under the License are * distributed on an 'AS IS' basis, WITHOUT WARRANTY OF ANY KIND, EITHER * EXPRESS OR IMPLIED, AND APPLE HEREBY DISCLAIMS ALL SUCH WARRANTIES, * INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, * FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT OR NON-INFRINGEMENT. * Please see the License for the specific language governing rights and * limitations under the License. * * @APPLE_LICENSE_HEADER_END@ */ * HOMEPAGE: * https://www.opensource.apple.com/source/configd/configd-453.19/dnsinfo/dnsinfo.h --- This product optionally depends on 'Brotli4j', Brotli compression and decompression for Java., which can be obtained at: * LICENSE: * license/LICENSE.brotli4j.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/hyperxpro/Brotli4j --- ========== ========== ========== Fourth-Party Dependencies io.projectreactor reactor-core

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		io.projectreactor.netty reactor-netty-core io.projectreactor.netty reactor-netty-http License : Apache License Version 2.0 Copyright © 2020 VMware, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. License text : [0] in License reference. ========== Fourth-Party Dependencies org.reactivestreams reactive-streams License: MIT No Attribution Copyright 2014 Reactive Streams See Appendix G ========== License References are mentioned below. Apache License, Version 2.0 See Appendix E GNU LESSER GENERAL PUBLIC LICENSE Version 2.1, see Appendix T Eclipse Public License - v 1.0 See Appendix J Eclipse Public License - v 2.0 - See Appendix Y

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-boot-starter-web 2.7.4	Top-Level Component Copyright: --- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== org.springframework.boot:spring-boot-starter-webflux: License: Apache License Version 2.0 Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. License text : [0] in License reference. ---------- NOTICE ---------- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. ========== Fourth-Party Dependencies org.springframework.boot spring-boot

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.springframework.boot spring-boot-autoconfigure org.springframework.boot spring-boot-starter org.springframework.boot spring-boot-starter-json org.springframework.boot spring-boot-starter-logging org.springframework.boot spring-boot-starter-reactor-netty org.springframework.boot spring-boot-starter-webflux Common Copyright: License : Apache License Version 2.0 License text : [0] in License reference. Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Notices: --- Spring Boot Copyright (c) 2012-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. --- ========== ========== ========== Fourth-Party Dependencies org.springframework spring-aop org.springframework spring-beans org.springframework spring-context

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.springframework spring-core org.springframework spring-expression org.springframework spring-jcl org.springframework spring-web Common Copyright: License : Apache License Version 2.0 License text : [0] in License reference. Copyright 2002-2022 Pivotal, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Notices: --- Spring Framework Copyright (c) 2002-2022 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. --- ========== ========== ========== Fourth-Party Dependencies

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.apache.logging.log4j log4j-api org.apache.logging.log4j log4j-to-slf4j License : Apache License Version 2.0 [0] Common Copyright Notice Copyright 1999-2022 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- Apache Log4j Copyright 1999-2019 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ResolverUtil.java Copyright 2005-2006 Tim Fennell Dumbster SMTP test server Copyright 2004 Jason Paul Kitchen TypeUtil.java Copyright 2002-2012 Ramnivas Laddad, Juergen Hoeller, Chris Beams picocli (http://picocli.info) Copyright 2017 Remko Popma TimeoutBlockingWaitStrategy.java and parts of Util.java Copyright 2011 LMAX Ltd. ========== Fourth-Party Dependencies ch.qos.logback logback-classic

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		ch.qos.logback logback-core License : GNU Lesser General Public License version 2.1, Eclipse Public License v1.0 Logback: the reliable, generic, fast and flexible logging framework. Copyright (C) 1999-2017, QOS.ch. All rights reserved. This program and the accompanying materials are dual-licensed under either the terms of the Eclipse Public License v1.0 as published by the Eclipse Foundation or (per the licensee's choosing) under the terms of the GNU Lesser General Public License version 2.1 as published by the Free Software Foundation. License text : [1], [2] in License reference. Oracle elects EPL. ========== ========== ========== Fourth-Party Dependencies org.slf4j:slf4j-api Copyright (c) 2004-2017 QOS.ch All rights reserved. License: MIT License See Appendix G ========== ========== Fourth-Party Dependencies jul-to-slf4j Copyright (c) 2004-2017 QOS.ch All rights reserved. License: MIT License See Appendix G ========== ========== ========== Fourth-Party Dependencies jakarta.annotation:jakarta.annotation-api License: Eclipse Public License Version 2.0 + GPL2 w/ CPE [3]

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright: Text of Copyright Copyright (c) 2012, 2021 Oracle and/or its affiliates. All rights reserved. This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0, which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU General Public License, version 2 with the GNU Classpath Exception, which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 All content is the property of the respective authors or their employers. For more information regarding authorship of content, please consult the listed source code repository logs. Oracle elects EPL 2.0 ---------- # Notices for Jakarta Annotations This content is produced and maintained by the Jakarta Annotations project. * Project home: https://projects.eclipse.org/projects/ee4j.ca ## Trademarks Jakarta Annotations is a trademark of the Eclipse Foundation. ## Declared Project Licenses This program and the accompanying materials are made available under the terms of the Eclipse Public License v. 2.0 which is available at http://www.eclipse.org/legal/epl-2.0. This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License v. 2.0 are satisfied: GNU

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		General Public License, version 2 with the GNU Classpath Exception which is available at https://www.gnu.org/software/classpath/license.html. SPDX-License-Identifier: EPL-2.0 OR GPL-2.0 WITH Classpath-exception-2.0 Oracle elects EPL 2.0. ## Source Code The project maintains the following source code repositories: * https://github.com/eclipse-ee4j/common-annotations-api ## Third-party Content ## Cryptography Content may contain encryption software. The country in which you are currently may have restrictions on the import, possession, and use, and/or re-export to another country, of encryption software. BEFORE using any encryption software, please check the country's laws, regulations and policies concerning the import, possession, or use, and re-export of encryption software, to see if this is permitted. ========== Fourth-Party Dependencies org.yaml snakeyaml License : Apache License Version 2.0 License text : [0] in License reference. Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== ========== ========== Fourth-Party Dependencies com.fasterxml.jackson.core jackson-annotations com.fasterxml.jackson.core jackson-core com.fasterxml.jackson.core jackson-databind com.fasterxml.jackson.datatype jackson-datatype-jdk8 com.fasterxml.jackson.datatype jackson-datatype-jsr310 com.fasterxml.jackson.module jackson-module-parameter-names License : Apache License Version 2.0 [0] Common copyright notice: Copyright (c) 2019 Tatu Saloranta This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ---------- Notice: # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers. ## Licensing Jackson 2.x core and extension components are licensed under Apache License 2.0

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		To find the details that apply to this artifact see the accompanying LICENSE file. ## Credits A list of contributors may be found from CREDITS(-2.x) file, which is included in some artifacts (usually source distributions); but is always available from the source code management (SCM) system project uses. ========== Fourth-Party Dependencies io.netty netty-buffer io.netty netty-codec io.netty netty-codec-dns io.netty netty-codec-http io.netty netty-codec-http2 io.netty netty-codec-socks io.netty netty-common io.netty netty-handler io.netty netty-handler-proxy io.netty netty-resolver io.netty netty-resolver-dns io.netty netty-resolver-dns-classes-macos io.netty netty-resolver-dns-native-macos io.netty netty-transport io.netty netty-transport-classes-epoll io.netty netty-transport-native-epoll io.netty netty-transport-native-unix-common License : Apache License Version 2.0 License text : [0] in License reference. Copyright 2011 The Netty Project The Netty Project licenses this file to you under the Apache License, version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Also, please refer to each LICENSE..txt file, which is located in the 'license' directory of the distribution file, for the license terms of the components that this product depends on. ---------- --- Notice: The Netty Project ========== Please visit the Netty web site for more information: * https://netty.io/ Copyright 2014 The Netty Project The Netty Project licenses this file to you under the Apache License, version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at: https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Also, please refer to each LICENSE..txt file, which is located in the 'license' directory of the distribution file, for the license terms of the components that this product depends on. ---------- ---- This product contains the extensions to Java Collections Framework which has been derived from the works by JSR-166 EG, Doug Lea, and Jason T. Greene:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* LICENSE: * license/LICENSE.jsr166y.txt (Public Domain) The person or persons who have associated work with this document (the "Dedicator" or "Certifier") hereby either (a) certifies that, to the best of his knowledge, the work of authorship identified is in the public domain of the country from which the work is published, or (b) hereby dedicates whatever copyright the dedicators holds in the work of authorship identified below (the "Work") to the public domain. A certifier, moreover, dedicates any copyright interest he may have in the associated work, and for these purposes, is described as a "dedicator" below. A certifier has taken reasonable steps to verify the copyright status of this work. Certifier recognizes that his good faith efforts may not shield him from liability if in fact the work certified is not in the public domain. Dedicator makes this dedication for the benefit of the public at large and to the detriment of the Dedicator's heirs and successors. Dedicator intends this dedication to be an overt act of relinquishment in perpetuity of all present and future rights under copyright law, whether vested or contingent, in the Work. Dedicator understands that such relinquishment of all rights includes the relinquishment of all rights to enforce (by lawsuit or otherwise) those copyrights in the Work. Dedicator recognizes that, once placed in the public domain, the Work may be freely reproduced, distributed, transmitted, used, modified, built upon, or otherwise exploited by anyone for any purpose, commercial or non-commercial, and in any way, including by methods that have not yet been invented or conceived. * HOMEPAGE: * http://gee.cs.oswego.edu/cgi-bin/viewcvs.cgi/jsr166/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* http://viewvc.jboss.org/cgi-bin/viewvc.cgi/jbosscache/experimental/jsr166/ --- This product contains a modified version of Robert Harder's Public Domain Base64 Encoder and Decoder, which can be obtained at: * LICENSE: * license/LICENSE.base64.txt (Public Domain) The person or persons who have associated work with this document (the "Dedicator" or "Certifier") hereby either (a) certifies that, to the best of his knowledge, the work of authorship identified is in the public domain of the country from which the work is published, or (b) hereby dedicates whatever copyright the dedicators holds in the work of authorship identified below (the "Work") to the public domain. A certifier, moreover, dedicates any copyright interest he may have in the associated work, and for these purposes, is described as a "dedicator" below. A certifier has taken reasonable steps to verify the copyright status of this work. Certifier recognizes that his good faith efforts may not shield him from liability if in fact the work certified is not in the public domain. Dedicator makes this dedication for the benefit of the public at large and to the detriment of the Dedicator's heirs and successors. Dedicator intends this dedication to be an overt act of relinquishment in perpetuity of all present and future rights under copyright law, whether vested or contingent, in the Work. Dedicator understands that such relinquishment of all rights includes the relinquishment of all rights to enforce (by lawsuit or otherwise) those copyrights in the Work. Dedicator recognizes that, once placed in the public domain, the Work may be

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		freely reproduced, distributed, transmitted, used, modified, built upon, or otherwise exploited by anyone for any purpose, commercial or non-commercial, and in any way, including by methods that have not yet been invented or conceived. * HOMEPAGE: * http://iharder.sourceforge.net/current/java/base64/ ---------- This product contains a modified portion of 'Webbit', an event based WebSocket and HTTP server, which can be obtained at: * LICENSE: * license/LICENSE.webbit.txt (BSD License) (BSD License: https://www.opensource.org/licenses/bsd-license) Copyright (c) 2011, Joe Walnes, Aslak Hellesøy and contributors All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. * Neither the name of the Webbit nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. * HOMEPAGE: * https://github.com/joewalnes/webbit ---------- This product contains a modified portion of 'SLF4J', a simple logging facade for Java, which can be obtained at: * LICENSE: * license/LICENSE.slf4j.txt (MIT License) /* * Copyright (c) 2004-2007 QOS.ch * All rights reserved. * See Appendix G */ * HOMEPAGE: * https://www.slf4j.org/ ---------- This product contains a modified portion of 'Apache Harmony', an open source Java SE, which can be obtained at: * NOTICE: * license/NOTICE.harmony.txt Apache Harmony

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2006, 2010 The Apache Software Foundation. This product includes software developed at The Apache Software Foundation (https://www.apache.org/). * LICENSE: * license/LICENSE.harmony.txt (Apache License 2.0) * HOMEPAGE: * https://archive.apache.org/dist/harmony/ ---------- This product contains a modified portion of 'jbzip2', a Java bzip2 compression and decompression library written by Matthew J. Francis. It can be obtained at: * LICENSE: * license/LICENSE.jbzip2.txt (MIT License) Copyright (c) 2010-2011 Matthew J. Francis and Contributors of the jbzip2 Project See Appendix G * HOMEPAGE: * https://code.google.com/p/jbzip2/ ---------- This product contains a modified portion of 'libdivsufsort', a C API library to construct the suffix array and the Burrows-Wheeler transformed string for any input string of a constant-size alphabet written by Yuta Mori. It can be obtained at: * LICENSE: * license/LICENSE.libdivsufsort.txt (MIT License) Copyright (c) 2003-2008 Yuta Mori All Rights Reserved. See Appendix G * HOMEPAGE: * https://github.com/y-256/libdivsufsort ---------- This product contains a modified portion of Nitsan Wakart's 'JCTools', Java Concurrency Tools for the JVM, which can be obtained at: * LICENSE: * license/LICENSE.jctools.txt (ASL2 License) * HOMEPAGE: * https://github.com/JCTools/JCTools

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		--- --- This product optionally depends on 'JZlib', a re-implementation of zlib in pure Java, which can be obtained at: * LICENSE: * license/LICENSE.jzlib.txt (BSD style License) Copyright (c) 2000,2001,2002,2003,2004 ymnk, JCraft,Inc. All rights reserved. See Appendix M * HOMEPAGE: * http://www.jcraft.com/jzlib/ --- --- This product optionally depends on 'Compress-LZF', a Java library for encoding and decoding data in LZF format, written by Tatu Saloranta. It can be obtained at: * LICENSE: * license/LICENSE.compress-lzf.txt (Apache License 2.0) Copyright 2009-2010 Ning, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS,WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. * HOMEPAGE: * https://github.com/ning/compress --- --- This product optionally depends on 'lz4', a LZ4 Java compression and decompression library written by Adrien Grand. It can be obtained at: * LICENSE:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* license/LICENSE.lz4.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jpountz/lz4-java ---------- This product optionally depends on 'lzma-java', a LZMA Java compression and decompression library, which can be obtained at: * LICENSE: * license/LICENSE.lzma-java.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jponge/lzma-java ---------- This product optionally depends on 'zstd-jni', a zstd-jni Java compression and decompression library, which can be obtained at: * LICENSE: * license/LICENSE.zstd-jni.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/luben/zstd-jni ---------- This product contains a modified portion of 'jfastlz', a Java port of FastLZ compression and decompression library written by William Kinney. It can be obtained at: * LICENSE: * license/LICENSE.jfastlz.txt (MIT License) The MIT License Copyright (c) 2009 William Kinney See Appendix G * HOMEPAGE: * https://code.google.com/p/jfastlz/ ---------- This product contains a modified portion of and optionally depends on 'Protocol Buffers', Google's data interchange format, which can be obtained at: * LICENSE: * license/LICENSE.protobuf.txt (New BSD License) Protocol Buffers - Google's data interchange format Copyright 2013 Google Inc. All rights reserved. https://developers.google.com/protocol-buffers/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See Appendix M Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license. * HOMEPAGE: * https://github.com/google/protobuf --- This product optionally depends on 'Bouncy Castle Crypto APIs' to generate a temporary self-signed X.509 certificate when the JVM does not provide the equivalent functionality. It can be obtained at: * LICENSE: * license/LICENSE.bouncycastle.txt (MIT License) The MIT License (MIT) Copyright (c) 2000 - 2013 The Legion of the Bouncy Castle Inc. (https://www.bouncycastle.org) See Appendix G * HOMEPAGE: * https://www.bouncycastle.org/ --- This product optionally depends on 'Snappy', a compression library produced by Google Inc, which can be obtained at: * LICENSE: * license/LICENSE.snappy.txt (New BSD License) Copyright 2011, Google Inc. All rights reserved. See Appendix M * HOMEPAGE: * https://github.com/google/snappy --- This product optionally depends on 'JBoss Marshalling', an alternative Java serialization API, which can be obtained at: * LICENSE:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* license/LICENSE.jboss-marshalling.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jboss-remoting/jboss-marshalling --- This product optionally depends on 'Caliper', Google's micro- benchmarking framework, which can be obtained at: * LICENSE: * license/LICENSE.caliper.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/google/caliper --- This product optionally depends on 'Apache Commons Logging', a logging framework, which can be obtained at: * LICENSE: * license/LICENSE.commons-logging.txt (Apache License 2.0) * HOMEPAGE: * https://commons.apache.org/logging/ --- This product optionally depends on 'Apache Log4J', a logging framework, which can be obtained at: * LICENSE: * license/LICENSE.log4j.txt (Apache License 2.0) * HOMEPAGE: * https://logging.apache.org/log4j/ --- This product optionally depends on 'Aalto XML', an ultra-high performance non-blocking XML processor, which can be obtained at: * LICENSE: * license/LICENSE.aalto-xml.txt (Apache License 2.0) This copy of Aalto XML processor is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		https://www.apache.org/licenses/ A copy is also included with both the the downloadable source code package and jar that contains class bytecodes, as file "ASL 2.0". In both cases, that file should be located next to this file: in source distribution the location should be "release-notes/asl"; and in jar "META-INF/" * HOMEPAGE: * http://wiki.fasterxml.com/AaltoHome --- This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Twitter. It can be obtained at: * LICENSE: * license/LICENSE.hpack.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/twitter/hpack --- This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Cory Benfield. It can be obtained at: * LICENSE: * license/LICENSE.hyper-hpack.txt (MIT License) The MIT License (MIT) Copyright (c) 2014 Cory Benfield See Appendix G * HOMEPAGE: * https://github.com/python-hyper/hpack/ --- This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Tatsuhiro Tsujikawa. It can be obtained at: * LICENSE: * license/LICENSE.nghttp2-hpack.txt (MIT License) The MIT License Copyright (c) 2012, 2014, 2015, 2016 Tatsuhiro Tsujikawa

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2012, 2014, 2015, 2016 nghttp2 contributors See Appendix G * HOMEPAGE: * https://github.com/nghttp2/nghttp2/ --- This product contains a modified portion of 'Apache Commons Lang', a Java library provides utilities for the java.lang API, which can be obtained at: * LICENSE: * license/LICENSE.commons-lang.txt (Apache License 2.0) * HOMEPAGE: * https://commons.apache.org/proper/commons-lang/ --- This product contains the Maven wrapper scripts from 'Maven Wrapper', that provides an easy way to ensure a user has everything necessary to run the Maven build. * LICENSE: * license/LICENSE.mvn-wrapper.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/takari/maven-wrapper --- This product contains the dnsinfo.h header file, that provides a way to retrieve the system DNS configuration on MacOS. This private header is also used by Apple's open source mDNSResponder (https://opensource.apple.com/tarballs/mDNSResponder/). * LICENSE: * license/LICENSE.dnsinfo.txt (Apple Public Source License 2.0) /* * Copyright (c) 2004-2006, 2008, 2009, 2011 Apple Inc. All rights reserved. * * @APPLE_LICENSE_HEADER_START@ * * This file contains Original Code and/or Modifications of Original Code

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* as defined in and that are subject to the Apple Public Source License * Version 2.0 (the 'License'). You may not use this file except in * compliance with the License. Please obtain a copy of the License at * https://www.opensource.apple.com/apsl/ and read it before using this * file. * * The Original Code and all software distributed under the License are * distributed on an 'AS IS' basis, WITHOUT WARRANTY OF ANY KIND, EITHER * EXPRESS OR IMPLIED, AND APPLE HEREBY DISCLAIMS ALL SUCH WARRANTIES, * INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, * FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT OR NON-INFRINGEMENT. * Please see the License for the specific language governing rights and * limitations under the License. * * @APPLE_LICENSE_HEADER_END@ */ * HOMEPAGE: * https://www.opensource.apple.com/source/configd/configd-453.19/dnsinfo/dnsinfo.h --- This product optionally depends on 'Brotli4j', Brotli compression and decompression for Java., which can be obtained at: * LICENSE: * license/LICENSE.brotli4j.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/hyperxpro/Brotli4j --- ========== Fourth-Party Dependencies io.projectreactor reactor-core

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		io.projectreactor.netty reactor-netty-core io.projectreactor.netty reactor-netty-http License : Apache License Version 2.0 Copyright © 2020 VMware, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. License text : [0] in License reference. ========== ========== ========== Fourth-Party Dependencies org.reactivestreams reactive-streams License: MIT No Attribution Copyright 2014 Reactive Streams See Appendix G ========== ========== ========== License References are mentioned below. ========== Start License Reference [0] ========== Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION 1. Definitions. "License" shall mean the terms and conditions for use, reproduction,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		and distribution as defined by Sections 1 through 9 of this document. "Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License. "Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity. "You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License. "Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files. "Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types. "Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below). "Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof. "Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution." "Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work. 2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Work and such Derivative Works in Source or Object form. 3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed. 4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions: (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and (b) You must cause any modified files to carry prominent notices stating that You changed the files; and (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		excluding those notices that do not pertain to any part of the Derivative Works; and (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License. 5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions. 6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file. 7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License. 8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages. 9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability. END OF TERMS AND CONDITIONS APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class name and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright [yyyy] [name of copyright owner] Licensed under the Apache License, Version 2.0 (the "License");

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ========== End License Reference [0] ========== ========== Start License Reference [1] ========== GNU LESSER GENERAL PUBLIC LICENSE Version 2.1, February 1999 Copyright (C) 1991, 1999 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed. [This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.] See Appendix A END OF TERMS AND CONDITIONS How to Apply These Terms to Your New Libraries If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		ordinary General Public License). To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found. Copyright (C) This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA Also add information on how to contact you by electronic and paper mail. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker. , 1 April 1990 Ty Coon, President of Vice That's all there is to it! ========== End License Reference [1]

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		========== == ========== Start License Reference [2] ========== Eclipse Public License - v 1.0 Appendix J ========== End License Reference [2] ========== == ========== Start License Reference [3] ========== Eclipse Public License - v 2.0 - See Appendix Y ---------- GNU GENERAL PUBLIC LICENSE Version 2, June 1991 Copyright (C) 1989, 1991 Free Software Foundation, Inc. 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301, USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed. Preamble See Appendix A END OF TERMS AND CONDITIONS --- ## CLASSPATH EXCEPTION Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License version 2 cover the whole combination. As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version. ========== End License Reference [3] ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Spring IO	spring-integration-file 5.4.6	Component: spring-integration-file: Commons-io : ----------Copyright Notice---------- Apache Commons IO Copyright 2002-2017 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ---------- Apache License, Version 2.0 See Appendix E ---------- spring-integration-core ---------- Copyright Info ---------- /* * Copyright 2002-2019 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- 4th Party Dependencies: 1. io.projectreactor » reactor-core V 3.3.3.RELEASE (Apache 2.0) 2. org.springframework » spring-aop V 5.2.4.RELEASE (Apache 2.0) 3. org.springframework » spring-context V 5.2.4.RELEASE (Apache 2.0) 4. org.springframework » spring-core V

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		5.2.4.RELEASE (Apache 2.0) 5. org.springframework » spring-messaging V 5.2.4.RELEASE (Apache 2.0) 6. org.springframework » spring-tx V 5.2.4.RELEASE (Apache 2.0) 7. org.springframework.retry » spring-retry V 1.2.5.RELEASE (Apache 2.0) 4th Party and its children copyright info: 1. io.projectreactor » reactor-core V 3.3.3.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright (c) 2011-2019 Pivotal Software Inc, All Rights Reserved. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- ---------- 1.1 org.reactivestreams » reactive-streams V 1.0.3 (CCO 1.0) ---------- Copyright Info ---------- / ********** ********** * Licensed under Public Domain (CC0) * * * * To the extent possible under law, the person who associated CC0 with * * this code has waived all copyright and

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		related or neighboring * * rights to this code. * * * * You should have received a copy of the CC0 legalcode along with this * * work. If not, see .* ********** ********** ---------- ---------- 2. org.springframework » spring-aop V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2017 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- ---------- 2.1 org.springframework » spring-beans V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2019 the original author or authors. * * Licensed under the Apache License, Version

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- 2.1.1 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) --- Copyright Info --- /* * Copyright 2002-2020 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- 2.2 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) --- Copyright Info --- See early section

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- ---------- 3. org.springframework » spring-context V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2014 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- ---------- 3.1 org.springframework » spring-aop V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2017 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/ LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- 3.1.1 org.springframework » spring-beans V 5.2.4.RELEASE (Apache 2.0) --- Copyright Info --- /* * Copyright 2002-2019 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- 3.1.1.1 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) --- Copyright Info --- See early section --- 3.1.2 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) --- Copyright Info --- See early section --- 3.2 org.springframework » spring-beans V 5.2.4.RELEASE (Apache 2.0) --- Copyright Info

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- See early section ---------- 3.3 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- 3.4 org.springframework » spring-expression V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2017 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- 3.4.1 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- 4. org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		------------------------ 5. org.springframework » spring-messaging V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2018 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- 5.1 org.springframework » spring-beans V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- 5.2 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- 6. org.springframework » spring-tx V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2012 the original author or authors. *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- 6.1 org.springframework » spring-beans V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- 6.2 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- 7. org.springframework.retry » spring-retry V 1.2.5.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2006-2007 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- ---------- 7.1 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- ---------- Apache License, Version 2.0 See Appendix E ---------- CCO License ---------- CC0 1.0 Universal Official translations of this legal tool are available in other languages. CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS DOCUMENT DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS- IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER. Statement of Purpose The laws of most jurisdictions throughout the world automatically confer exclusive Copyright and Related Rights (defined below) upon the creator and subsequent owner(s) (each and all, an "owner") of an original work of authorship and/or a database (each, a "Work"). Certain owners wish to permanently relinquish those rights to a Work for the purpose of contributing to a commons of creative, cultural and scientific works ("Commons") that the public can reliably and without fear of later claims of infringement build upon, modify, incorporate in other works, reuse and redistribute as freely as possible in any form

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		whatsoever and for any purposes, including without limitation commercial purposes. These owners may contribute to the Commons to promote the ideal of a free culture and the further production of creative, cultural and scientific works, or to gain reputation or greater distribution for their Work in part through the use and efforts of others. For these and/or other purposes and motivations, and without any expectation of additional consideration or compensation, the person associating CC0 with a Work (the "Affirmer"), to the extent that he or she is an owner of Copyright and Related Rights in the Work, voluntarily elects to apply CC0 to the Work and publicly distribute the Work under its terms, with knowledge of his or her Copyright and Related Rights in the Work and the meaning and intended legal effect of CC0 on those rights. 1. Copyright and Related Rights. A Work made available under CC0 may be protected by copyright and related or neighboring rights ("Copyright and Related Rights"). Copyright and Related Rights include, but are not limited to, the following: the right to reproduce, adapt, distribute, perform, display, communicate, and translate a Work; moral rights retained by the original author(s) and/or performer(s); publicity and privacy rights pertaining to a person's image or likeness depicted in a Work; rights protecting against unfair competition in regards to a Work, subject to the limitations in paragraph 4(a), below; rights protecting the extraction, dissemination, use and reuse of data in a Work; database rights (such as those arising under Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, and under any national implementation thereof, including any amended or successor version of such directive); and other similar, equivalent or corresponding rights throughout the world based on applicable law or treaty, and any national implementations thereof. 2. Waiver. To the greatest extent permitted by, but not in contravention of, applicable

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		law, Affirmer hereby overtly, fully, permanently, irrevocably and unconditionally waives, abandons, and surrenders all of Affirmer's Copyright and Related Rights and associated claims and causes of action, whether now known or unknown (including existing as well as future claims and causes of action), in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "Waiver"). Affirmer makes the Waiver for the benefit of each member of the public at large and to the detriment of Affirmer's heirs and successors, fully intending that such Waiver shall not be subject to revocation, rescission, cancellation, termination, or any other legal or equitable action to disrupt the quiet enjoyment of the Work by the public as contemplated by Affirmer's express Statement of Purpose. 3. Public License Fallback. Should any part of the Waiver for any reason be judged legally invalid or ineffective under applicable law, then the Waiver shall be preserved to the maximum extent permitted taking into account Affirmer's express Statement of Purpose. In addition, to the extent the Waiver is so judged Affirmer hereby grants to each affected person a royalty-free, non transferable, non sublicensable, non exclusive, irrevocable and unconditional license to exercise Affirmer's Copyright and Related Rights in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "License"). The License shall be deemed effective as of the date CC0 was applied by Affirmer to the Work. Should any part of the License for any reason be judged legally invalid or ineffective under applicable law, such partial invalidity or ineffectiveness shall not invalidate the remainder of the License, and in such case

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Affirmer hereby affirms that he or she will not (i) exercise any of his or her remaining Copyright and Related Rights in the Work or (ii) assert any associated claims and causes of action with respect to the Work, in either case contrary to Affirmer's express Statement of Purpose. 4. Limitations and Disclaimers. No trademark or patent rights held by Affirmer are waived, abandoned, surrendered, licensed or otherwise affected by this document. Affirmer offers the Work as-is and makes no representations or warranties of any kind concerning the Work, express, implied, statutory or otherwise, including without limitation warranties of title, merchantability, fitness for a particular purpose, non infringement, or the absence of latent or other defects, accuracy, or the present or absence of errors, whether or not discoverable, all to the greatest extent permissible under applicable law. Affirmer disclaims responsibility for clearing rights of other persons that may apply to the Work or any use thereof, including without limitation any person's Copyright and Related Rights in the Work. Further, Affirmer disclaims responsibility for obtaining any necessary consents, permissions or other rights required for any use of the Work. Affirmer understands and acknowledges that Creative Commons is not a party to this document and has no duty or obligation with respect to this CC0 or use of the Work. ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Spring IO	spring-integration-file 5.2.4.RELEASE 5.2.4	Component Name: spring-integration-core ---------- Copyright Info ---------- /* * Copyright 2002-2019 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- -- 4th Party Dependencies: 1. io.projectreactor » reactor-core V 3.3.3.RELEASE (Apache 2.0) 2. org.springframework » spring-aop V 5.2.4.RELEASE (Apache 2.0) 3. org.springframework » spring-context V 5.2.4.RELEASE (Apache 2.0) 4. org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) 5. org.springframework » spring-messaging V 5.2.4.RELEASE (Apache 2.0) 6. org.springframework » spring-tx V 5.2.4.RELEASE (Apache 2.0) 7. org.springframework.retry » spring-retry V 1.2.5.RELEASE (Apache 2.0) 4th Party and its children copyright info: 1. io.projectreactor » reactor-core V 3.3.3.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /*

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Copyright (c) 2011-2019 Pivotal Software Inc, All Rights Reserved. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- -- 1.1 org.reactivestreams » reactive-streams V 1.0.3 (CCO 1.0) ---------- Copyright Info ---------- / ********** ******** * Licensed under Public Domain (CC0) * * * * To the extent possible under law, the person who associated CC0 with * * this code has waived all copyright and related or neighboring * * rights to this code. * * * * You should have received a copy of the CC0 legalcode along with this * * work. If not, see <http://creativecommons.org/publicdomain/zero/1.0/>.* ********** ********/ ---------- --

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		2. org.springframework » spring-aop V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2017 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- 2.1 org.springframework » spring-beans V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2019 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		2.1.1 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2020 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- 2.2 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- 3. org.springframework » spring-context V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2014 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* See the License for the specific language governing permissions and * limitations under the License. */ ---------- 3.1 org.springframework » spring-aop V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2017 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- 3.1.1 org.springframework » spring-beans V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2019 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		/ --- 3.1.1.1 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section --- 3.1.2 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section --- 3.2 org.springframework » spring-beans V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section --- 3.3 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section --- 3.4 org.springframework » spring-expression V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- / * Copyright 2002-2017 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		/ --- 3.4.1 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section --- 4. org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section --- 5. org.springframework » spring-messaging V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- / * Copyright 2002-2018 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- -- 5.1 org.springframework » spring-beans V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section --- -- 5.2 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- Copyright Info ---------- See early section ---------- 6. org.springframework » spring-tx V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2002-2012 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- -- 6.1 org.springframework » spring-beans V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- -- 6.2 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- -- 7. org.springframework.retry » spring-retry V 1.2.5.RELEASE (Apache 2.0) ---------- Copyright Info ---------- /*

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Copyright 2006-2007 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- -- 7.1 org.springframework » spring-core V 5.2.4.RELEASE (Apache 2.0) ---------- Copyright Info ---------- See early section ---------- -- ---------- Apache 2.0 License ---------- Apache License, Version 2.0 See Appendix E ---------- -- ---------- CCO License ---------- CC0 1.0 Universal Official translations of this legal tool are available in other languages. CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS DOCUMENT DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM THE USE OF THIS DOCUMENT OR THE INFORMATION OR WORKS PROVIDED HEREUNDER.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Statement of Purpose The laws of most jurisdictions throughout the world automatically confer exclusive Copyright and Related Rights (defined below) upon the creator and subsequent owner(s) (each and all, an "owner") of an original work of authorship and/or a database (each, a "Work"). Certain owners wish to permanently relinquish those rights to a Work for the purpose of contributing to a commons of creative, cultural and scientific works ("Commons") that the public can reliably and without fear of later claims of infringement build upon, modify, incorporate in other works, reuse and redistribute as freely as possible in any form whatsoever and for any purposes, including without limitation commercial purposes. These owners may contribute to the Commons to promote the ideal of a free culture and the further production of creative, cultural and scientific works, or to gain reputation or greater distribution for their Work in part through the use and efforts of others. For these and/or other purposes and motivations, and without any expectation of additional consideration or compensation, the person associating CC0 with a Work (the "Affirmer"), to the extent that he or she is an owner of Copyright and Related Rights in the Work, voluntarily elects to apply CC0 to the Work and publicly distribute the Work under its terms, with knowledge of his or her Copyright and Related Rights in the Work and the meaning and intended legal effect of CC0 on those rights. 1. Copyright and Related Rights. A Work made available under CC0 may be protected by copyright and related or neighboring rights ("Copyright and Related Rights"). Copyright and Related Rights include, but are not limited to, the following: the right to reproduce, adapt, distribute, perform, display, communicate, and translate a Work; moral rights retained by the original author(s) and/or performer(s); publicity and privacy rights pertaining to a person's image or likeness depicted in a Work; rights protecting against unfair competition in regards to a Work, subject to the limitations in paragraph 4(a), below; rights protecting the extraction, dissemination, use and reuse of data in a Work; database rights (such as those arising under Directive 96/9/EC of the European Parliament and of the Council of 11 March 1996 on the legal protection of databases, and under any national implementation thereof, including any amended or successor version of such directive);

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		and other similar, equivalent or corresponding rights throughout the world based on applicable law or treaty, and any national implementations thereof. 2. Waiver. To the greatest extent permitted by, but not in contravention of, applicable law, Affirmer hereby overtly, fully, permanently, irrevocably and unconditionally waives, abandons, and surrenders all of Affirmer's Copyright and Related Rights and associated claims and causes of action, whether now known or unknown (including existing as well as future claims and causes of action), in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "Waiver"). Affirmer makes the Waiver for the benefit of each member of the public at large and to the detriment of Affirmer's heirs and successors, fully intending that such Waiver shall not be subject to revocation, rescission, cancellation, termination, or any other legal or equitable action to disrupt the quiet enjoyment of the Work by the public as contemplated by Affirmer's express Statement of Purpose. 3. Public License Fallback. Should any part of the Waiver for any reason be judged legally invalid or ineffective under applicable law, then the Waiver shall be preserved to the maximum extent permitted taking into account Affirmer's express Statement of Purpose. In addition, to the extent the Waiver is so judged Affirmer hereby grants to each affected person a royalty-free, non transferable, non sublicensable, non exclusive, irrevocable and unconditional license to exercise Affirmer's Copyright and Related Rights in the Work (i) in all territories worldwide, (ii) for the maximum duration provided by applicable law or treaty (including future time extensions), (iii) in any current or future medium and for any number of copies, and (iv) for any purpose whatsoever, including without limitation commercial, advertising or promotional purposes (the "License"). The License shall be deemed effective as of the date CC0 was applied by Affirmer to the Work. Should any part of the License for any reason be judged legally invalid or ineffective under applicable law, such partial invalidity or ineffectiveness shall not invalidate the remainder of the License, and in such case Affirmer hereby affirms that he or she will not (i) exercise any of his or her remaining Copyright and Related Rights in the Work or (ii) assert any associated claims and causes of action with respect to the Work, in either case contrary to Affirmer's express Statement of Purpose. 4. Limitations and Disclaimers. No trademark or patent rights held by Affirmer are waived, abandoned, surrendered, licensed or otherwise affected by this document. Affirmer offers the Work as-is

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		and makes no representations or warranties of any kind concerning the Work, express, implied, statutory or otherwise, including without limitation warranties of title, merchantability, fitness for a particular purpose, non infringement, or the absence of latent or other defects, accuracy, or the present or absence of errors, whether or not discoverable, all to the greatest extent permissible under applicable law. Affirmer disclaims responsibility for clearing rights of other persons that may apply to the Work or any use thereof, including without limitation any person's Copyright and Related Rights in the Work. Further, Affirmer disclaims responsibility for obtaining any necessary consents, permissions or other rights required for any use of the Work. Affirmer understands and acknowledges that Creative Commons is not a party to this document and has no duty or obligation with respect to this CC0 or use of the Work. ---------- -- Commons-io : Apache License Apache License, Version 2.0 See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
SpringSource	Spring Batch 4.2.4.RELEASE	Spring Batch 4.2.4.RELEASE Copyright (c) 2002-2019 Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. Apache License, Version 2.0 See Appendix E ========== ========== SPRING FRAMEWORK 4.0.2.RELEASE SUBCOMPONENTS: Spring Framework 4.0.2.RELEASE includes a number of subcomponents with separate copyright notices and license terms. The product that includes this file does not necessarily use all the open source subcomponents referred to below. Your use of the source code for these subcomponents is subject to the terms and conditions of the following licenses. >>> ASM 4.0 (org.ow2.asm:asm:4.0, org.ow2.asm:asm-commons:4.0): Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved. See Appendix M Copyright (c) 1999-2009, OW2 Consortium <http://www.ow2.org/ > >>> CGLIB 3.0 (cglib:cglib:3.0): Per the LICENSE file in the CGLIB JAR distribution downloaded from http://sourceforge.net/projects/cglib/files/cglib3/3.0/cglib-3.0.jar/download, CGLIB 3.0 is licensed under the Apache License, version 2.0, the text of which is included above. ========== ========== To the extent any open source subcomponents are licensed under the EPL and/or other similar licenses that require the source code and/or modifications to source code to be made available (as would be noted above), you may obtain a copy of the source code corresponding to the binaries for such open source components and modifications thereto, if any, (the "Source Files"), by downloading the Source Files from http://www.springsource.org/download, or by sending a request, with your name and address to: Pivotal, Inc., 875 Howard St, San Francisco, CA 94103

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		United States of America or email info@gopivotal.com. All such requests should clearly specify: OPEN SOURCE FILES REQUEST Attention General Counsel Pivotal shall mail a copy of the Source Files to you on a CD or equivalent physical medium. This offer to obtain a copy of the Source Files is valid for three years from the date you acquired this Software product. Batch Applications for the Java Platform Version 1.0 1 License IBM Corporation (the “Spec Lead”) for the Java Batch specification (the “Specification”) hereby grants permission to copy and display the Specification, in any medium without fee or royalty, provided that you include the following on ALL copies, or portions thereof, that you make: 1. A link or URL to the Specification at this location: http://jcp.org/aboutJava/communityprocess/final/jsr352/index.html 2. The copyright notice as shown herein. The Spec Lead offers to grant a perpetual, non - exclusive, worldwide, fully paid - up, royalty free, irrevocable license under its licensable copyrights and patent claims for which there is no technically feasible way of avoiding infringement in the course of implementing the Specification, provided that you: (a) fully implement the Specification including all its required i nterfaces and functionality. (b) do not modify, subset, superset or otherwise extend the Specification's name space; (c) pass the TCK for this Specification; and (d) grant a reciprocal license to any of your patents necessary to implement required portions of the Specification on terms consistent with the provisions of Section 6.A of the Java Specification Participation Agreement. THE SPECIFICATION IS PROVIDED "AS IS," AND THE SPEC LEAD AND ANY OTHER AUTHORS MAKE NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR TITLE; THAT THE CONTENTS OF THE SPECIFICATION ARE SUITABLE FOR ANY PURPOSE; NOR THAT THE IMPLEMENTATION OF SUCH CONTENTS WILL NOT

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		INFRINGE ANY THIRD PARTY PATENTS, COPYRIGHTS, TRADEMARKS OR OTHER RIGHTS. THE SPEC LEAD AND ANY OTHER AUTHORS WILL NOT BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF ANY USE OF THE SPECIFICATION OR THE PERFORMANCE OR IMPLEMENTATION OF THE CONTENTS THEREOF. The name and trademarks of the Spec Lead or any other Authors may NOT be used in any manner, including advertising or publicity pertaining to the Specification or its contents without specific, written prior permission. Title to copyright in the Specification will at all times remain with the Authors. No other rights are granted by implication, estoppel or otherwise. CDDL licence for jms api 2.0.1 1. Definitions. 1.1. "Contributor" means each individual or entity that creates or contributes to the creation of Modifications. 1.2. "Contributor Version" means the combination of the Original Software, prior Modifications used by a Contributor (if any), and the Modifications made by that particular Contributor. 1.3. "Covered Software" means (a) the Original Software, or (b) Modifications, or (c) the combination of files containing Original Software with files containing Modifications, in each case including portions thereof. 1.4. "Executable" means the Covered Software in any form other than Source Code. 1.5. "Initial Developer" means the individual or entity that first makes Original Software available under this License. 1.6. "Larger Work" means a work which combines Covered Software or portions thereof with code not governed by the terms of this License. 1.7. "License" means this document. 1.8. "Licensable" means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein. 1.9. "Modifications" means the Source Code and Executable form of any of the following: A. Any file that results from an addition to, deletion from or modification of the contents of a file containing Original Software or previous Modifications; B. Any new file that contains any part of the Original Software or previous Modification; or C. Any new file that is contributed or otherwise made available under the terms of this License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		1.10. "Original Software" means the Source Code and Executable form of computer software code that is originally released under this License. 1.11. "Patent Claims" means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor. 1.12. "Source Code" means (a) the common form of computer software code in which modifications are made and (b) associated documentation included in or with such code. 1.13. "You" (or "Your") means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, "You" includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity. 2. License Grants. 2.1. The Initial Developer Grant. Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, the Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license: (a) under intellectual property rights (other than patent or trademark) Licensable by Initial Developer, to use, reproduce, modify, display, perform, sublicense and distribute the Original Software (or portions thereof), with or without Modifications, and/or as part of a Larger Work; and (b) under Patent Claims infringed by the making, using or selling of Original Software, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Software (or portions thereof). (c) The licenses granted in Sections 2.1(a) and (b) are effective on the date Initial Developer first distributes or otherwise makes the Original Software available to a third party under the terms of this License. (d) Notwithstanding Section 2.1(b) above, no patent license is granted: (1) for code that You delete from the Original Software, or (2) for infringements caused by: (i) the modification of the Original Software, or (ii) the combination of the Original Software with other software or devices. 2.2. Contributor Grant. Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license: (a) under intellectual property rights (other than patent or trademark) Licensable by Contributor to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof), either on an unmodified basis, with other Modifications, as Covered Software and/or as part of a Larger Work; and (b) under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: (1) Modifications made by that Contributor (or portions thereof); and (2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination). (c) The licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first distributes or otherwise makes the Modifications available to a third party. (d) Notwithstanding Section 2.2(b) above, no patent license is granted: (1) for any code that Contributor has deleted from the Contributor Version;(2) for infringements caused by: (i) third party modifications of Contributor Version, or (ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or (3) under Patent Claims infringed by Covered Software in the absence of Modifications made by that Contributor. 3. Distribution Obligations. 3.1. Availability of Source Code. Any Covered Software that You distribute or otherwise make available in Executable form must also be made available in Source Code form and that Source Code form must be distributed only under the terms of this License. You must include a copy of this License with every copy of the Source Code form of the Covered Software You distribute or otherwise make available. You must inform recipients of any such Covered Software in Executable form as to how they can obtain such Covered Software in Source Code form in a reasonable manner on or through a medium customarily used for software exchange. 3.2. Modifications. The Modifications that You create or to which You contribute are governed by the terms of this License. You represent that You believe Your Modifications are Your original creation(s) and/or You have sufficient rights to grant the rights conveyed by this License. 3.3. Required Notices.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		You must include a notice in each of Your Modifications that identifies You as the Contributor of the Modification. You may not remove or alter any copyright, patent or trademark notices contained within the Covered Software, or any notices of licensing or any descriptive text giving attribution to any Contributor or the Initial Developer. 3.4. Application of Additional Terms. You may not offer or impose any terms on any Covered Software in Source Code form that alters or restricts the applicable version of this License or the recipients' rights hereunder. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, you may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear that any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer. 3.5. Distribution of Executable Versions. You may distribute the Executable form of the Covered Software under the terms of this License or under the terms of a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable form does not attempt to limit or alter the recipient's rights in the Source Code form from the rights set forth in this License. If You distribute the Covered Software in Executable form under a different license, You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer. 3.6. Larger Works. You may create a Larger Work by combining Covered Software with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Software. 4. Versions of the License. 4.1. New Versions. Oracle is the initial license steward and may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version number. Except as provided in Section 4.3, no one other

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		than the license steward has the right to modify this License. 4.2. Effect of New Versions. You may always continue to use, distribute or otherwise make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. If the Initial Developer includes a notice in the Original Software prohibiting it from being distributed or otherwise made available under any subsequent version of the License, You must distribute and make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. Otherwise, You may also choose to use, distribute or otherwise make the Covered Software available under the terms of any subsequent version of the License published by the license steward. 4.3. Modified Versions. When You are an Initial Developer and You want to create a new license for Your Original Software, You may create and use a modified version of this License if You: (a) rename the license and remove any references to the name of the license steward (except to note that the license differs from this License); and (b) otherwise make it clear that the license contains terms which differ from this License. 5. DISCLAIMER OF WARRANTY. COVERED SOFTWARE IS PROVIDED UNDER THIS LICENSE ON AN "AS IS" BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED SOFTWARE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGING. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED SOFTWARE IS WITH YOU. SHOULD ANY COVERED SOFTWARE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED SOFTWARE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER. 6. TERMINATION. 6.1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive. 6.2. If You assert a patent infringement claim (excluding declaratory judgment actions) against Initial Developer

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		or a Contributor (the Initial Developer or Contributor against whom You assert such claim is referred to as "Participant") alleging that the Participant Software (meaning the Contributor Version where the Participant is a Contributor or the Original Software where the Participant is the Initial Developer) directly or indirectly infringes any patent, then any and all rights granted directly or indirectly to You by such Participant, the Initial Developer (if the Initial Developer is not the Participant) and all Contributors under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively and automatically at the expiration of such 60 day notice period, unless if within such 60 day period You withdraw Your claim with respect to the Participant Software against such Participant either unilaterally or pursuant to a written agreement with Participant. 6.3. If You assert a patent infringement claim against Participant alleging that the Participant Software directly or indirectly infringes any patent where such claim is resolved (such as by license or settlement) prior to the initiation of patent infringement litigation, then the reasonable value of the licenses granted by such Participant under Sections 2.1 or 2.2 shall be taken into account in determining the amount or value of any payment or license. 6.4. In the event of termination under Sections 6.1 or 6.2 above, all end user licenses that have been validly granted by You or any distributor hereunder prior to termination (excluding licenses granted to You by any distributor) shall survive termination. 7. LIMITATION OF LIABILITY. UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER TORT (INCLUDING NEGLIGENCE), CONTRACT, OR OTHERWISE, SHALL YOU, THE INITIAL DEVELOPER, ANY OTHER CONTRIBUTOR, OR ANY DISTRIBUTOR OF COVERED SOFTWARE, OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES, EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM SUCH PARTY'S NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU. 8. U.S. GOVERNMENT END USERS. The Covered Software is a "commercial item," as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of "commercial computer software" (as that term is defined at 48 C.F.R. § 252.227-7014(a)(1)) and "commercial computer software documentation" as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Software with only those rights set forth herein. This U.S. Government Rights clause is in lieu of, and supersedes, any other FAR, DFAR, or other clause or provision that addresses Government rights in computer software under this License. 9. MISCELLANEOUS. This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by the law of the jurisdiction specified in a notice contained within the Original Software (except to the extent applicable law, if any, provides otherwise), excluding such jurisdiction's conflict-of-law provisions. Any litigation relating to this License shall be subject to the jurisdiction of the courts located in the jurisdiction and venue specified in a notice contained within the Original Software, with the losing party responsible for costs, including, without limitation, court costs and reasonable attorneys' fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License. You agree that You alone are responsible for compliance with the United States export administration regulations (and the export control laws and regulation of any other countries) when You use, distribute or otherwise make available any Covered Software. 10. RESPONSIBILITY FOR CLAIMS. As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc.	Spring Cloud Contract 2.2.3.RELEASE	Copyright 2012-2020 the original author or authors. Apache License, Version 2.0 See Appendix E ++++++++++++++++++++ groovy, 2.5.10, Apache 2.0 Apache Groovy Copyright 2003-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). This product bundles icons from the famfamfam.com silk icons set http://www.famfamfam.com/lab/icons/silk/ Licensed under the Creative Commons Attribution Licence v2.5 http://creativecommons.org/licenses/by/2.5/ ++++++++++++++++++ org.apache.camel, v3.1.0, Apache 2.0 Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to You under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ++++++++++++++++++++++++ commons-text, v1.8, Apache 2.0 Apache Commons Text Copyright 2014-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). ++++++++++++++++++++++++++ org.jetbrains.kotlin, v1.3.72, Apache 2.0 Kotlin Compiler Copyright 2010-2020 JetBrains s.r.o and respective authors and developers ========== ==========

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		== NOTICE file corresponding to the section 4 d of == == the Apache License, Version 2.0, == == in this case for the Kotlin Compiler distribution. == ========== ========== ++++++++++++++++++++++ io.rest-assured, v4.2.0, Apache 2.0 /* * Copyright 2020 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software	Spring Cloud Starter Gateway 3.0.3 Spring Cloud Starter Gateway 3.0.7	TOP-LEVEL COPYRIGHT NOTICE for org.springframework.cloud:spring-cloud-starter-gateway:3.0.3 © 2021 VMware, Inc. or its affiliates ---------separator--------- TOP-LEVEL LICENSE TEXT for org.springframework.cloud:spring-cloud-starter-gateway:3.0.3 Apache License - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework.cloud:spring-cloud-starter 3.0.3 FOURTH-PARTY DEPENDENCY #2 org.springframework.cloud:spring-cloud-gateway-server 3.0.3 FOURTH-PARTY DEPENDENCY #3 org.springframework.boot:spring-boot-starter-webflux 2.5.2 FOURTH-PARTY DEPENDENCY #4 org.springframework.boot:spring-boot-starter 2.5.2 FOURTH-PARTY DEPENDENCY #5 org.springframework.boot:spring-boot-starter-json:2.5.2 FOURTH-PARTY DEPENDENCY #6 org.springframework.boot:spring-boot-starter-reactor-netty:2.5.2 FOURTH-PARTY DEPENDENCY #7 org.springframework.boot:spring-boot-starter-validation:2.5.2 FOURTH-PARTY DEPENDENCY #8 io.projectreactor.netty:reactor-netty:1.0.8 FOURTH-PARTY DEPENDENCY #9 io.projectreactor.addons:reactor-extra:3.4.3 FOURTH-PARTY DEPENDENCY #10 reactor:reactor-core:3.4.7 COMMON COPYRIGHT NOTICES © 2021 VMware, Inc. or its affiliates COMMON LICENSE NOTICES Apache License, Version 2.0 Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework:spring-web:5.3.8 FOURTH-PARTY DEPENDENCY #2 org.springframework:spring-beans:5.3.8 FOURTH-PARTY DEPENDENCY #3 org.springframework:spring-core:5.3.8

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #4 org.springframework:spring-webflux:5.3.8 COMMON COPY RIGHT TEXT © 2021 VMware, Inc. or its affiliates. Terms of Use • Privacy • Trademark Guidelines Apache®, Apache Tomcat®, Apache Kafka®, Apache Cassandra™, and Apache Geode™ are trademarks or registered trademarks of the Apache Software Foundation in the United States and/or other countries. Java™, Java™ SE, Java™ EE, and OpenJDK™ are trademarks of Oracle and/or its affiliates. Kubernetes® is a registered trademark of the Linux Foundation in the United States and other countries. Linux® is the registered trademark of Linus Torvalds in the United States and other countries. Windows® and Microsoft® Azure are registered trademarks of Microsoft Corporation. “AWS” and “Amazon Web Services” are trademarks or registered trademarks of Amazon.com Inc. or its affiliates. All other trademarks and copyrights are property of their respective owners and are only mentioned for informative purposes. Other names may be trademarks of their respective owners. COMMON LICENSE NOTICES Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.jboss.logging:jboss-logging:3.4.2.Final FOURTH-PARTY DEPENDENCY #2 com.fasterxml:classmate:1.5.1 COMMON LICENSE TEXT Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT COMMON NOTICE # Jackson JSON processor Jackson is a high-performance, Free/Open Source JSON processing library. It was originally written by Tatu Saloranta (tatu.saloranta@iki.fi), and has been in development since 2007. It is currently developed by a community of developers, as well as supported commercially by FasterXML.com. ## Licensing Jackson core and extension components may licensed under different licenses. To find the details that apply to this artifact see the accompanying LICENSE file. For more information, including possible other licensing options, contact FasterXML.com (http://fasterxml.com). ## Credits A list of contributors may be found from CREDITS file, which is included in some artifacts (usually source

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		distributions); but is always available from the source code management (SCM) system project uses. ----------seperator---------- FOURTH-PARTY DEPENDENCY #1 jakarta.validation:jakarta.validation-api:2.0.2 FOURTH-PARTY DEPENDENCY #2 org.hibernate.validator:hibernate-validator:6.2.0.Final COPYRIGHT TEXT Copyright © Red Hat, Inc. LICENSE TEXT Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT ----------seperator---------- FOURTH-PARTY DEPENDENCY #1 org.reactivestreams:reactive-streams:1.0.3 Licensed under Public Domain (CC0) To the extent possible under law, the person who associated CC0 with this code has waived all copyright and related or neighboring rights to this code. You should have received a copy of the CC0 legalcode along with this work. If not, see <http://creativecommons.org/publicdomain/zero/1.0/> ----------seperator---------- FOURTH-PARTY DEPENDENCY #1 io.netty:netty-codec-http:4.1.63.Final FOURTH-PARTY DEPENDENCY #2 io.netty:netty-common:4.1.63.Final FOURTH-PARTY DEPENDENCY #3 io.netty:netty-buffer:4.1.63.Final FOURTH-PARTY DEPENDENCY #4 io.netty:netty-transport:4.1.63.Final FOURTH-PARTY DEPENDENCY #5 io.netty:netty-resolver:4.1.63.Final FOURTH-PARTY DEPENDENCY #6 io.netty:netty-codec:4.1.63.Final FOURTH-PARTY DEPENDENCY #7 io.netty:netty-handler:4.1.63.Final FOURTH-PARTY DEPENDENCY #8 io.netty:netty-codec-http2:4.1.63.Final FOURTH-PARTY DEPENDENCY #9 io.netty:netty-handler:4.1.63.Final FOURTH-PARTY DEPENDENCY #10 io.netty:netty-codec-http:4.1.63.Final FOURTH-PARTY DEPENDENCY #11 io.netty:netty-handler-proxy: 4.1.63.Final FOURTH-PARTY DEPENDENCY #12 io.netty:netty-codec-socks:4.1.63.Final

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #13 io.netty:netty-transport-native-epoll: 4.1.63.Final FOURTH-PARTY DEPENDENCY #14 io.netty:netty-transport-native-unix-common:4.1.63.Final COMMON LICENSE TEXT Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT COMMON COPYRIGHT NOTICE TEXT The Netty Project ========== Please visit the Netty web site for more information: * https://netty.io/ Copyright 2014 The Netty Project The Netty Project licenses this file to you under the Apache License, version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at : Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Also, please refer to each LICENSE.<component>.txt file, which is located in the 'license' directory of the distribution file, for the license terms of the components that this product depends on. --- --> This product contains the extensions to Java Collections Framework which has been derived from the works by JSR-166 EG, Doug Lea, and Jason T. Greene: * LICENSE: * license/LICENSE.jsr166y.txt (Public Domain) * HOMEPAGE: * http://gee.cs.oswego.edu/cgi-bin/viewcvs.cgi/jsr166/ * http://viewvc.jboss.org/cgi-bin/viewvc.cgi/jbosscache/experimental/jsr166/ --> This product contains a modified version of Robert Harder's Public Domain Base64 Encoder and Decoder, which can be obtained at: * LICENSE: * license/LICENSE.base64.txt (Public Domain) * HOMEPAGE:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* http://iharder.sourceforge.net/current/java/base64/ COMMON LICENSE TEXT for Public Domain: The person or persons who have associated work with this document (the "Dedicator" or "Certifier") hereby either (a) certifies that, to the best of his knowledge, the work of authorship identified is in the public domain of the country from which the work is published, or (b) hereby dedicates whatever copyright the dedicators holds in the work of authorship identified below (the "Work") to the public domain. A certifier, moreover, dedicates any copyright interest he may have in the associated work, and for these purposes, is described as a "dedicator" below. A certifier has taken reasonable steps to verify the copyright status of this work. Certifier recognizes that his good faith efforts may not shield him from liability if in fact the work certified is not in the public domain. Dedicator makes this dedication for the benefit of the public at large and to the detriment of the Dedicator's heirs and successors. Dedicator intends this dedication to be an overt act of relinquishment in perpetuity of all present and future rights under copyright law, whether vested or contingent, in the Work. Dedicator understands that such relinquishment of all rights includes the relinquishment of all rights to enforce (by lawsuit or otherwise) those copyrights in the Work. Dedicator recognizes that, once placed in the public domain, the Work may be freely reproduced, distributed, transmitted, used, modified, built upon, or otherwise exploited by anyone for any purpose, commercial or non-commercial, and in any way, including by methods that have not yet been invented or conceived. --> This product contains a modified portion of 'Webbit', an event based WebSocket and HTTP server, which can be obtained at: * LICENSE: * license/LICENSE.webbit.txt (BSD License) * HOMEPAGE: * https://github.com/joewalnes/webbit LICENSE TEXT : (BSD License: http://www.opensource.org/licenses/bsd-license) Copyright (c) 2011, Joe Walnes, Aslak Hellesøy and contributors All rights reserved. See Appendix M --> This product contains a modified portion of 'SLF4J', a simple logging facade for Java, which can be obtained at: * LICENSE: * license/LICENSE.slf4j.txt (MIT License) * HOMEPAGE: * http://www.slf4j.org/ LICENSE TEXT : /*

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Copyright (c) 2004-2007 QOS.ch * All rights reserved. * See Appendix G */ --> This product contains a modified portion of 'Apache Harmony', an open source Java SE, which can be obtained at: * NOTICE: * license/NOTICE.harmony.txt * LICENSE: * license/LICENSE.harmony.txt (Apache License 2.0) * HOMEPAGE: * http://archive.apache.org/dist/harmony/ NOTICE TEXT: Apache Harmony Copyright 2006, 2010 The Apache Software Foundation. This product includes software developed at The Apache Software Foundation (http://www.apache.org/). LICENSE TEXT for Apache License 2.0 is provided below under COMMON LICENSE TEXT. -->This product optionally depends on 'lz4', a LZ4 Java compression and decompression library written by Adrien Grand. It can be obtained at: * LICENSE: * license/LICENSE.lz4.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jpountz/lz4-java LICENSE TEXT for Apache License 2.0 is provided below under COMMON LICENSE TEXT. --> This product optionally depends on 'lzma-java', a LZMA Java compression and decompression library, which can be obtained at: * LICENSE: * license/LICENSE.lzma-java.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/jponge/lzma-java LICENSE TEXT for Apache License 2.0 is provided below under COMMON LICENSE TEXT. --> This product optionally depends on 'JBoss Marshalling', an alternative Java serialization API, which can be obtained at: * LICENSE: * license/LICENSE.jboss-marshalling.txt (Apache License 2.0)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* HOMEPAGE: * https://github.com/jboss-remoting/jboss-marshalling LICENSE TEXT for Apache License 2.0 is provided below under COMMON LICENSE TEXT. --> This product optionally depends on 'Caliper', Google's micro- benchmarking framework, which can be obtained at: * LICENSE: * license/LICENSE.caliper.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/google/caliper LICENSE TEXT for Apache License 2.0 is provided below under COMMON LICENSE TEXT. --> This product optionally depends on 'Apache Commons Logging', a logging framework, which can be obtained at: * LICENSE: * license/LICENSE.commons-logging.txt (Apache License 2.0) * HOMEPAGE: * http://commons.apache.org/logging/ LICENSE TEXT for Apache License 2.0 is provided below under COMMON LICENSE TEXT. --> This product optionally depends on 'Apache Log4J', a logging framework, which can be obtained at: * LICENSE: * license/LICENSE.log4j.txt (Apache License 2.0) * HOMEPAGE: * http://logging.apache.org/log4j/ LICENSE TEXT for Apache License 2.0 is provided below under COMMON LICENSE TEXT. --> This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Twitter. It can be obtained at: * LICENSE: * license/LICENSE.hpack.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/twitter/hpack LICENSE TEXT for Apache License 2.0 is provided below under COMMON LICENSE TEXT. --> This product contains a modified portion of 'Apache Commons Lang', a Java library provides utilities for the java.lang API, which can be obtained at: * LICENSE: * license/LICENSE.commons-lang.txt (Apache License 2.0) * HOMEPAGE:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* https://commons.apache.org/proper/commons-lang/ LICENSE TEXT for Apache License 2.0 is provided below under COMMON LICENSE TEXT. --> This product contains the Maven wrapper scripts from 'Maven Wrapper', that provides an easy way to ensure a user has everything necessary to run the Maven build. LICENSE: * license/LICENSE.mvn-wrapper.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/takari/maven-wrapper LICENSE TEXT for Apache License 2.0 is provided below under COMMON LICENSE TEXT. COMMON LICENSE TEXT for Apache License 2.0 : Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT --> This product contains a modified portion of 'jbzip2', a Java bzip2 compression and decompression library written by Matthew J. Francis. It can be obtained at: * LICENSE: * license/LICENSE.jbzip2.txt (MIT License) * HOMEPAGE: * https://code.google.com/p/jbzip2/ LICENSE TEXT: Copyright (c) 2010-2011 Matthew J. Francis and Contributors of the jbzip2 Project See Appendix G --> This product contains a modified portion of 'libdivsufsort', a C API library to construct the suffix array and the Burrows-Wheeler transformed string for any input string of a constant-size alphabet written by Yuta Mori. It can be obtained at: * LICENSE: * license/LICENSE.libdivsufsort.txt (MIT License) * HOMEPAGE: * https://github.com/y-256/libdivsufsort LICENSE TEXT: Copyright (c) 2003-2008 Yuta Mori All Rights Reserved. See Appendix G --> This product contains a modified portion of Nitsan Wakart's 'JCTools', Java Concurrency Tools for the JVM, which can be obtained at: * LICENSE: * license/LICENSE.jctools.txt (ASL2 License) * HOMEPAGE: * https://github.com/JCTools/JCTools

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		LICENSE TEXT: Please refer to Apache License text mentioned under TOP-LEVEL LICENSE TEXT --> This product optionally depends on 'JZlib', a re-implementation of zlib in pure Java, which can be obtained at: * LICENSE: * license/LICENSE.jzlib.txt (BSD style License) * HOMEPAGE: * http://www.jcraft.com/jzlib/ LICENSE TEXT: Copyright (c) 2000,2001,2002,2003,2004 ymnk, JCraft,Inc. All rights reserved. See Appendix M --> This product optionally depends on 'Compress-LZF', a Java library for encoding and decoding data in LZF format, written by Tatu Saloranta. It can be obtained at: * LICENSE: * license/LICENSE.compress-lzf.txt (Apache License 2.0) * HOMEPAGE: * https://github.com/ning/compress LICENSE TEXT: Copyright 2009-2010 Ning, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS,WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --> This product contains a modified portion of 'jfastlz', a Java port of FastLZ compression and decompression library written by William Kinney. It can be obtained at: * LICENSE: * license/LICENSE.jfastlz.txt (MIT License) * HOMEPAGE: * https://code.google.com/p/jfastlz/ LICENSE TEXT: The MIT License Copyright (c) 2009 William Kinney See Appendix G --> This product contains a modified portion of and optionally depends on 'Protocol Buffers', Google's data interchange format, which can be obtained at:

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* LICENSE: * license/LICENSE.protobuf.txt (New BSD License) * HOMEPAGE: * https://github.com/google/protobuf LICENSE TEXT: Protocol Buffers - Google's data interchange format Copyright 2013 Google Inc. All rights reserved. https://developers.google.com/protocol-buffers/ See Appendix M Code generated by the Protocol Buffer compiler is owned by the owner of the input file used when generating it. This code is not standalone and requires a support library to be linked with it. This support library is itself covered by the above license. --> This product optionally depends on 'Bouncy Castle Crypto APIs' to generate a temporary self-signed X.509 certificate when the JVM does not provide the equivalent functionality. It can be obtained at: * LICENSE: * license/LICENSE.bouncycastle.txt (MIT License) * HOMEPAGE: * http://www.bouncycastle.org/ LICENSE TEXT: The MIT License (MIT) Copyright (c) 2000 - 2013 The Legion of the Bouncy Castle Inc. (http://www.bouncycastle.org) See Appendix G * LICENSE: * license/LICENSE.snappy.txt (New BSD License) * HOMEPAGE: * https://github.com/google/snappy LICENSE : Copyright 2011, Google Inc. All rights reserved. See Appendix M --> This product optionally depends on 'Aalto XML', an ultra-high performance non-blocking XML processor, which can be obtained at: * LICENSE: * license/LICENSE.aalto-xml.txt (Apache License 2.0) * HOMEPAGE: * http://wiki.fasterxml.com/AaltoHome LICENSE TEXT: This copy of Aalto XML processor is licensed under the Apache (Software) License, version 2.0 ("the License").

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/ A copy is also included with both the the downloadable source code package and jar that contains class bytecodes, as file "ASL 2.0". In both cases, that file should be located next to this file: in source distribution the location should be "release-notes/asl"; and in jar "META-INF/" --> This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Cory Benfield. It can be obtained at: * LICENSE: * license/LICENSE.hyper-hpack.txt (MIT License) * HOMEPAGE: * https://github.com/python-hyper/hpack/ LICENSE TEXT: The MIT License (MIT) Copyright (c) 2014 Cory Benfield See Appendix G --> This product contains a modified version of 'HPACK', a Java implementation of the HTTP/2 HPACK algorithm written by Tatsuhiro Tsujikawa. It can be obtained at: * LICENSE: * license/LICENSE.nghttp2-hpack.txt (MIT License) * HOMEPAGE: * https://github.com/nghttp2/nghttp2/ LICENSE TEXT: The MIT License Copyright (c) 2012, 2014, 2015, 2016 Tatsuhiro Tsujikawa Copyright (c) 2012, 2014, 2015, 2016 nghttp2 contributors See Appendix G --> This product contains the dnsinfo.h header file, that provides a way to retrieve the system DNS configuration on MacOS. This private header is also used by Apple's open source mDNSResponder (https://opensource.apple.com/tarballs/mDNSResponder/). * LICENSE: * license/LICENSE.dnsinfo.txt (Apache License 2.0) * HOMEPAGE: * http://www.opensource.apple.com/source/configd/configd-453.19/dnsinfo/dnsinfo.h LICENSE TEXT :

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		/* * Copyright (c) 2004-2006, 2008, 2009, 2011 Apple Inc. All rights reserved. * * @APPLE_LICENSE_HEADER_START@ * * This file contains Original Code and/or Modifications of Original Code * as defined in and that are subject to the Apple Public Source License * Version 2.0 (the 'License'). You may not use this file except in * compliance with the License. Please obtain a copy of the License at * http://www.opensource.apple.com/apsl/ and read it before using this * file. * * The Original Code and all software distributed under the License are * distributed on an 'AS IS' basis, WITHOUT WARRANTY OF ANY KIND, EITHER * EXPRESS OR IMPLIED, AND APPLE HEREBY DISCLAIMS ALL SUCH WARRANTIES, * INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, * FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT OR NON-INFRINGEMENT. * Please see the License for the specific language governing rights and * limitations under the License. * * @APPLE_LICENSE_HEADER_END@ */ ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
The Go Authors	http2 0.2.0 http2 0.0.0-20210908191846-a5e095526f91	TOP-LEVEL COPYRIGHT NOTICE for http2 --> 0.0.0-20210908191846-a5e095526f91 Copyright (c) 2009 The Go Authors. All rights reserved. See Appendix M -------- 4TH PARTY DEPENDENCIES ———— golang.org/x/net/http2/hpack --> 0.0.0-20210908191846-a5e095526f91 golang.org/x/net/idna --> 0.0.0-20210908191846-a5e095526f91 golang.org/x/net/http/httpguts --> 0.0.0-20210908191846-a5e095526f91 Copyright (c) 2009 The Go Authors. All rights reserved. See Appendix M ********** ********** ********** Additional IP Rights Grant (Patents) "This implementation" means the copyrightable works distributed by Google as part of the Go project. Google hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer and otherwise run, modify and propagate the contents of this implementation of Go, where such license applies only to those patent claims, both currently owned or controlled by Google and acquired in the future, licensable by Google that are necessarily infringed by this implementation of Go. This grant does not include claims that would be infringed only as a consequence of further modification of this implementation. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that this implementation of Go or any code incorporated within this implementation of Go constitutes direct or contributory patent

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		infringement, or inducement of patent infringement, then any patent rights granted to you under this License for this implementation of Go shall terminate as of the date such litigation is filed.
Spring IO	spring-cloud-kubernetes-fabric8-discovery 2.0.3 spring-cloud-kubernetes-fabric8-discovery 2.1.3	TOP-LEVEL COPYRIGHT NOTICE for org.springframework.cloud:spring-cloud-kubernetes-fabric8-discovery © 2021 VMware, Inc. or its affiliates. ---------separator--------- TOP-LEVEL LICENSE TEXT for org.springframework.cloud:spring-cloud-kubernetes-fabric8-discovery:2.0.3 APACHE 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework.cloud:spring-cloud-kubernetes-fabric8-autoconfig 2.0.3 FOURTH-PARTY DEPENDENCY #2 org.springframework.cloud:spring-cloud-context:3.0.3 FOURTH-PARTY DEPENDENCY #3 org.springframework.cloud:spring-cloud-commons:3.0.3 COMMON COPYRIGHT NOTICES © 2021 VMware, Inc. or its affiliates. COMMON LICENSE TEXT Same as TEXT mentioned under TOP-LEVEL License Text

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Spring IO	spring-cloud-starter-kubernetes-config 1.1.2	TOP-LEVEL COPYRIGHT NOTICE for org.springframework.cloud:spring-cloud-starter-kubernetes-config © 2020 Pivotal Software, Inc. All Rights Reserved ---------separator--------- TOP-LEVEL LICENSE TEXT for org.springframework.cloud:spring-cloud-starter-kubernetes-config:1.0.3.RELEASE APACHE 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework.cloud:spring-cloud-kubernetes-core 1.0.3.RELEASE FOURTH-PARTY DEPENDENCY #2 org.springframework.cloud:spring-cloud-kubernetes-config 1.0.3.RELEASE FOURTH-PARTY DEPENDENCY #3 io.fabric8:kubernetes-client 4.1.0 FOURTH-PARTY DEPENDENCY #4 org.springframework.boot:spring-boot-autoconfigure 2.2.4.RELEASE FOURTH-PARTY DEPENDENCY #5 org.springframework.cloud:spring-cloud-context 2.2.1.RELEASE COMMON COPYRIGHT NOTICES Copyright © 2020 Pivotal Software, Inc.. All rights reserved. COMMON LICENSE TEXT APACHE 2.0 - See Appendix E

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Spring IO	spring-cloud-starter-kubernetes-fabric8 2.0.3	TOP-LEVEL COPYRIGHT NOTICE for org.springframework.cloud:spring-cloud-starter-kubernetes-fabric8 © 2021 VMware, Inc. or its affiliates. ---------separator--------- TOP-LEVEL LICENSE TEXT for org.springframework.cloud:spring-cloud-starter-kubernetes-fabric8:2.0.3 APACHE 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework.cloud:spring-cloud-kubernetes-commons:2.0.3 FOURTH-PARTY DEPENDENCY #2 org.springframework.boot:spring-boot-autoconfigure:2.4.6->2.5.1(*) FOURTH-PARTY DEPENDENCY #3 org.springframework.cloud:spring-cloud-commons:3.0.3 FOURTH-PARTY DEPENDENCY #4 org.springframework.security:spring-security-crypto:5.4.6->5.5.0 FOURTH-PARTY DEPENDENCY #5 org.springframework.cloud:spring-cloud-context:3.0.3 FOURTH-PARTY DEPENDENCY #6 org.springframework.cloud:spring-cloud-kubernetes-commons:2.0.3(*) FOURTH-PARTY DEPENDENCY #7 org.springframework.boot:spring-boot-starter-json:2.4.6->2.5.1(*) FOURTH-PARTY DEPENDENCY #8 org.springframework.cloud:spring-cloud-context:3.0.3(*) FOURTH-PARTY DEPENDENCY #9 org.springframework.cloud:spring-cloud-kubernetes-fabric8-discovery:2.0.3 FOURTH-PARTY DEPENDENCY #10 org.springframework.cloud:spring-cloud-kubernetes-fabric8-autoconfig:2.0.3(*) FOURTH-PARTY DEPENDENCY #11 org.springframework.cloud:spring-cloud-commons:3.0.3(*) FOURTH-PARTY DEPENDENCY #12 org.springframework.cloud:spring-cloud-kubernetes-fabric8-autoconfig:2.0.3 COMMON COPYRIGHT NOTICES © 2021 VMware, Inc. or its affiliates.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		COMMON LICENSE TEXT Same as TEXT mentioned under TOP-LEVEL License Text ---------separator--------- FOURTH-PARTY DEPENDENCY #13 dk.brics.automaton:automaton:1.11-8 Copyright © 2011. All Rights Reserved. See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #14 org.yaml:snakeyaml:1.27->1.28 /** * Copyright (c) 2008, http://www.snakeyaml.org * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator--------- FOURTH-PARTY DEPENDENCY #15 com.squareup.okhttp3:okhttp:3.12.12->3.14.9(*) FOURTH-PARTY DEPENDENCY #16 com.squareup.okhttp3:logging-interceptor:3.12.12->3.14.9(*) Copyright 2019 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		language governing permissions and limitations under the License. ---------separator--------- FOURTH-PARTY DEPENDENCY #17 org.slf4j:slf4j-api:1.7.30 Copyright (c) 2004-2007 QOS.ch All rights reserved. See Appendix G ---------separator--------- FOURTH-PARTY DEPENDENCY #18 io.fabric8:zjsonpatch:0.3.0 /** * Copyright 2016 flipkart.com zjsonpatch. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator--------- FOURTH-PARTY DEPENDENCY #19 com.github.mifmif:generex:1.0.2 /* * Copyright 2014 y.mifrah * * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator--------- FOURTH-PARTY DEPENDENCY #20 io.fabric8:kubernetes-client:4.13.3 FOURTH-PARTY DEPENDENCY #21 io.fabric8:kubernetes-model-rbac:4.13.3 FOURTH-PARTY DEPENDENCY #22 io.fabric8:kubernetes-model-core:4.13.3(*) FOURTH-PARTY DEPENDENCY #23 io.fabric8:kubernetes-model-common:4.13.3(*) FOURTH-PARTY DEPENDENCY #24 io.fabric8:kubernetes-model-admissionregistration:4.13.3 FOURTH-PARTY DEPENDENCY #25 io.fabric8:kubernetes-model-apps:4.13.3 FOURTH-PARTY DEPENDENCY #26 io.fabric8:kubernetes-model-autoscaling:4.13.3 FOURTH-PARTY DEPENDENCY #27 io.fabric8:kubernetes-model-apiextensions:4.13.3 FOURTH-PARTY DEPENDENCY #28 io.fabric8:kubernetes-model-batch:4.13.3 FOURTH-PARTY DEPENDENCY #29 io.fabric8:kubernetes-model-certificates:4.13.3 FOURTH-PARTY DEPENDENCY #30 io.fabric8:kubernetes-model-coordination:4.13.3 FOURTH-PARTY DEPENDENCY #31 io.fabric8:kubernetes-model-discovery:4.13.3 FOURTH-PARTY DEPENDENCY #32 io.fabric8:kubernetes-model-events:4.13.3 FOURTH-PARTY DEPENDENCY #33 io.fabric8:kubernetes-model-extensions:4.13.3 FOURTH-PARTY DEPENDENCY #34 io.fabric8:kubernetes-model-networking:4.13.3 FOURTH-PARTY DEPENDENCY #35 io.fabric8:kubernetes-model-metrics:4.13.3 FOURTH-PARTY DEPENDENCY #36 io.fabric8:kubernetes-model-policy:4.13.3 FOURTH-PARTY DEPENDENCY #37

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		io.fabric8:kubernetes-model-scheduling:4.13.3 FOURTH-PARTY DEPENDENCY #38 io.fabric8:kubernetes-model-settings:4.13.3 FOURTH-PARTY DEPENDENCY #39 io.fabric8:kubernetes-model-storageclass:4.13.3 FOURTH-PARTY DEPENDENCY #40 io.fabric8:kubernetes-model-node:4.13.3 FOURTH-PARTY DEPENDENCY #41 io.fabric8:kubernetes-model-core:4.13.3 FOURTH-PARTY DEPENDENCY #42 io.fabric8:kubernetes-model-common:4.13.3 /** * Copyright (C) 2015 Red Hat, Inc. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------separator--------- FOURTH-PARTY DEPENDENCY #46 com.fasterxml.jackson:jackson-bom:2.12.3(*) FOURTH-PARTY DEPENDENCY #47 com.fasterxml.jackson.module:jackson-module-jaxb-annotations:2.11.2->2.12.3(*) FOURTH-PARTY DEPENDENCY #48 com.fasterxml.jackson.module:jackson-module-jaxb-annotations:2.11.2->2.12.3 FOURTH-PARTY DEPENDENCY #49 com.fasterxml.jackson.core:jackson-annotations:2.12.3(*) FOURTH-PARTY DEPENDENCY #50 com.fasterxml.jackson.core:jackson-core:2.12.3(*)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #51 com.fasterxml.jackson.core:jackson-databind:2.12.3(*) FOURTH-PARTY DEPENDENCY #52 com.fasterxml.jackson.dataformat:jackson-dataformat-yaml:2.11.2->2.12.3 FOURTH-PARTY DEPENDENCY #53 com.fasterxml.jackson.datatype:jackson-datatype-jsr310:2.11.2->2.12.3(*) Copyright © FasterXML. All rights reserved. COMMON LICENSE TEXT Same as TEXT mentioned under TOP-LEVEL License Text

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Spring IO	spring-cloud-starter-kubernetes-fabric8-config 2.0.3	TOP-LEVEL COPYRIGHT NOTICE for org.springframework.cloud:spring-cloud-starter-kubernetes-fabric8-config © 2021 VMware, Inc. or its affiliates. ---------separator--------- TOP-LEVEL LICENSE TEXT for org.springframework.cloud:spring-cloud-starter-kubernetes-fabric8-config:2.0.3 APACHE 2.0 - See Appendix E ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework.cloud:spring-cloud-kubernetes-commons 2.0.3 FOURTH-PARTY DEPENDENCY #2 org.springframework.cloud:spring-cloud-kubernetes-fabric8-autoconfig 2.0.3 FOURTH-PARTY DEPENDENCY #3 org.springframework.cloud:spring-cloud-kubernetes-fabric8-config 2.0.3 FOURTH-PARTY DEPENDENCY #4 io.fabric8:kubernetes-client 4.13.3 FOURTH-PARTY DEPENDENCY #5 org.springframework.boot:spring-boot-autoconfigure 2.5.2 FOURTH-PARTY DEPENDENCY #6 org.springframework.boot:spring-boot-starter:2.5.2 FOURTH-PARTY DEPENDENCY #7 org.springframework.cloud:spring-cloud-context:3.0.3 FOURTH-PARTY DEPENDENCY #8 org.springframework.cloud:spring-cloud-commons:3.0.3 FOURTH-PARTY DEPENDENCY #9 org.springframework.cloud:spring-cloud-starter-bootstrap:3.0.3 FOURTH-PARTY DEPENDENCY #10 org.springframework.cloud:spring-cloud-starter:3.0.3 COMMON COPYRIGHT NOTICES © 2021 VMware, Inc. or its affiliates. COMMON LICENSE TEXT Same as TEXT mentioned under TOP-LEVEL License Text

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Spring IO	spring-cloud-starter-kubernetes-fabric8-config 2.1.0	TOP-LEVEL COPYRIGHT NOTICE for org.springframework.cloud:spring-cloud-starter-kubernetes-fabric8-config © 2021 VMware, Inc. or its affiliates. ---------separator--------- TOP-LEVEL LICENSE TEXT for org.springframework.cloud:spring-cloud-starter-kubernetes-fabric8-config:2.0.4 Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION 1. Definitions. "License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document. "Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License. "Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity. "You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License. "Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files. "Object" form shall mean any form resulting from mechanical

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types. "Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below). "Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof. "Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution." "Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work. 2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form. 3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		as of the date such litigation is filed. 4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions: (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and (b) You must cause any modified files to carry prominent notices stating that You changed the files; and (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License. 5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions. 6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file. 7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License. 8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages. 9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		of your accepting any such warranty or additional liability. END OF TERMS AND CONDITIONS ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework.cloud:spring-cloud-kubernetes-commons 2.0.4 FOURTH-PARTY DEPENDENCY #2 org.springframework.cloud:spring-cloud-kubernetes-fabric8-autoconfig 2.0.4 FOURTH-PARTY DEPENDENCY #3 org.springframework.cloud:spring-cloud-kubernetes-fabric8-config 2.0.4 FOURTH-PARTY DEPENDENCY #4 io.fabric8:kubernetes-client 4.13.3 FOURTH-PARTY DEPENDENCY #5 org.springframework.boot:spring-boot-autoconfigure 2.5.5 FOURTH-PARTY DEPENDENCY #6 org.springframework.boot:spring-boot-starter:2.5.5 FOURTH-PARTY DEPENDENCY #7 org.springframework.cloud:spring-cloud-context:3.0.4 FOURTH-PARTY DEPENDENCY #8 org.springframework.cloud:spring-cloud-commons:3.0.4 FOURTH-PARTY DEPENDENCY #9 org.springframework.cloud:spring-cloud-starter-bootstrap:3.0.4 FOURTH-PARTY DEPENDENCY #10 org.springframework.cloud:spring-cloud-starter:3.0.4 COMMON COPYRIGHT NOTICES © 2021 VMware, Inc. or its affiliates. COMMON LICENSE TEXT Same as TEXT mentioned under TOP-LEVEL License Text ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Spring IO	spring-cloud-starter-kubernetes-fabric8-config 2.1.3	TOP-LEVEL COPYRIGHT NOTICE for org.springframework.cloud:spring-cloud-starter-kubernetes-fabric8-config © 2022 VMware, Inc. or its affiliates. ---------separator--------- TOP-LEVEL LICENSE TEXT for org.springframework.cloud:spring-cloud-starter-kubernetes-fabric8-config Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ TERMS AND CONDITIONS FOR USE, REPRODUCTION, AND DISTRIBUTION 1. Definitions. "License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document. "Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License. "Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity. "You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License. "Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files. "Object" form shall mean any form resulting from mechanical

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types. "Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below). "Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof. "Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution." "Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work. 2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display, publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form. 3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		as of the date such litigation is filed. 4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided that You meet the following conditions: (a) You must give any other recipients of the Work or Derivative Works a copy of this License; and (b) You must cause any modified files to carry prominent notices stating that You changed the files; and (c) You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and (d) If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add Your own attribution notices within Derivative Works that You distribute, alongside

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		or as an addendum to the NOTICE text from the Work, provided that such additional attribution notices cannot be construed as modifying the License. You may add Your own copyright statement to Your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of Your modifications, or for any such Derivative Works as a whole, provided Your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License. 5. Submission of Contributions. Unless You explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions. 6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file. 7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License. 8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages. 9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, You may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, You may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		of your accepting any such warranty or additional liability. END OF TERMS AND CONDITIONS ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework.cloud:spring-cloud-kubernetes-commons FOURTH-PARTY DEPENDENCY #2 org.springframework.cloud:spring-cloud-kubernetes-fabric8-autoconfig FOURTH-PARTY DEPENDENCY #3 org.springframework.cloud:spring-cloud-kubernetes-fabric8-config FOURTH-PARTY DEPENDENCY #4 io.fabric8:kubernetes-client FOURTH-PARTY DEPENDENCY #5 org.springframework.boot:spring-boot-autoconfigure FOURTH-PARTY DEPENDENCY #6 org.springframework.boot:spring-boot-starter FOURTH-PARTY DEPENDENCY #7 org.springframework.cloud:spring-cloud-context FOURTH-PARTY DEPENDENCY #8 org.springframework.cloud:spring-cloud-commons FOURTH-PARTY DEPENDENCY #9 org.springframework.cloud:spring-cloud-starter-bootstrap FOURTH-PARTY DEPENDENCY #10 org.springframework.cloud:spring-cloud-starter COMMON COPYRIGHT NOTICES © 2022 VMware, Inc. or its affiliates. COMMON LICENSE TEXT Same as TEXT mentioned under TOP-LEVEL License Text ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-cloud-stream 3.0.6.RELEASE	/* * Copyright 2018-2020 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ---------- APACHE 2.0 - See Appendix E ---------- 4th Party dependencies and its copyright: spring-boot-actuator, 2.3.0.RELEASE, Apache 2.0 ---------- Copyright Info ---------- /* * Copyright 2002-2018 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS,

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- --- org.springframework.cloud » spring-cloud-function-context , 3.0.7.RELEASE, (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2019-2019 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- --- org.springframework.integration » spring-integration-core, 5.3.0.RELEASE, (Apache 2.0) ---------- Copyright Info ---------- /* * Copyright 2018-2019 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- --- jackson-core, v2.10.0, Apache 2.0 jackson-databind, v2.10.0, Apache 2.0 Copyright (c) 2019, Tatu Saloranta <tatu.saloranta@iki.fi> This copy of Jackson JSON processor annotations is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 ++++++++++++++++++ Spring-retry, v1.3.0.RELEASE, Apache 2.0 /* * Copyright 2015 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* See the License for the specific language governing permissions and * limitations under the License. */

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Marty Pitt, Dilip Krishnan, and Adrian Kelly	Springfox 2.9.2	Copyright 2015 Marty Pitt - @martypitt, Dilip Krishnan - @dilipkrish, Adrian Kelly - @adrianbk, Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. APACHE 2.0 - See Appendix E Below are 4th party dependencies: ========== byte-buddy 1.6.14 ========== byte-buddy is licensed under the Apache License 2.0 Copyright 2019 Rafael Winterhalter, Scienta AS, Arbinsgate 11, 0253 Oslo, Norway ========== cglib 3.2.5 ========== Copyright 2003 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License") ========== classmate 1.3.3 ========== classmate is licensed under the Apache License 2.0 Copyright ©2009-2011 FasterXML, LLC. All rights reserved unless otherwise indicated. ========== Groovy 2.4.8 ======== Groovy is licensed under the terms of the Apache License, Version 2.0 Copyright 2003-2018 The Apache Software Foundation This product bundles icons from the famfamfam.com silk icons set http://www.famfamfam.com/lab/icons/silk/ Licensed under the Creative Commons Attribution Licence v2.5 http://creativecommons.org/licenses/by/2.5/ Creative Commons Attribution License, Attribution 2.5 - See Appendix U ========== guava 18.0 ========== Copyright (C) 2010 The Guava Authors Licensed under the Apache License, Version 2.0 (the "License") ========== ackson-databind 2.8.7

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		==== jackson-databind is licensed under Apache License 2.0. Copyright ©2009-2011 FasterXML, LLC. All rights reserved unless otherwise indicated. ========== jackson-core 2.8.7 ==== jackson-core is licensed under Apache License 2.0. Copyright ©2009-2011 FasterXML, LLC. All rights reserved unless otherwise indicated. ========== jackson-annotations 2.8.7 ==== jackson-annotations is licensed under Apache License 2.0. Copyright ©2009-2011 FasterXML, LLC. All rights reserved unless otherwise indicated. ========== snakeyaml 1.18 ======== Copyright (c) 2008, http://www.snakeyaml.org Licensed under the Apache License, Version 2.0 (the "License") ======== spock 1.1 ========== Copyright 2010 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License") ========== spring 4.3.8 ========== The Spring Framework is released under version 2.0 of the Apache License. Copyright (c) 2002-2018 Pivotal, Inc. ======== springHateoas 0.23.0 ========== Copyright 2017 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License") ========== springDataRest 2.6.3 ========== Copyright 2012-2018 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License") ========== springPluginVersion 1.2.0 ======

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright 2012-2018 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License") ========== springBoot 1.4.4 ======= Copyright 2012-2017 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License") ========== swagger2Core 1.5.13 ========== Copyright 2016 SmartBear Software Licensed under the Apache License, Version 2.0 (the "License") ********** org.slf4j:slf4j-api:1.7.25 (Apache License version 2)

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Marty Pitt, Dilip Krishnan, and Adrian Kelly	Springfox 3.0.0	APACHE 2.0 - See Appendix E Copyright 2015 Marty Pitt - @martypitt, Dilip Krishnan - @dilipkrish, Adrian Kelly - @adrianbk, Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. Springfox in this product also contains the following 4th party dependencies: --classmate is licensed under the Apache License 2.0. Copyright ©2009-2011 FasterXML, LLC. All rights reserved unless otherwise indicated. --spring-plugin-core is licensed under the Apache License version 2.0. /* * Copyright 2008-2019 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --spring-plugin-metadata is licensed under the Apache License version 2.0. /* * Copyright 2008-2019 the original author or authors. *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --slf4j:slf4j-api is licensed under the Apache License version 2.0.
Marty Pitt, Dilip Krishnan, and Adrian Kelly	springfox-boot-starter 3.0.0	com.fasterxml » classmate 1.5.1 io.springfox » springfox-oas 3.0.0 springfox-data-rest 3.0.0 io.springfox » springfox-bean-validators 3.0.0 io.springfox » springfox-swagger2 3.0.0 io.springfox » springfox-swagger-ui 3.0.0 org.springframework.plugin » spring-plugin-core 2.0.0.RELEASE org.springframework.plugin » spring-plugin-metadata 2.0.0.RELEASE APACHE 2.0 - See Appendix E ---------- Third party dependency org.slf4j » slf4j-api 1.7.25 See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
springfox Project, Technology	springfox-swagger2 3.0.0	Copyright 2015 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 or see Appendix E. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- It has the following fourth party source dependencies: com.fasterxml » classmate 1.5.1 io.springfox » springfox-spi 3.0.0 io.springfox » springfox-schema 3.0.0 iio.springfox » springfox-swagger-common 3.0.0 io.springfox » springfox-spring-web 3.0.0 io.springfox » springfox-spring-webmvc 3.0.0 io.springfox » springfox-spring-webflux 3.0.0 io.swagger » swagger-annotations 1.5.20 io.swagger » swagger-models 1.5.20 org.springframework.plugin » spring-plugin-core 2.0.0.RELEASE org.springframework.plugin » spring-plugin-metadata 2.0.0.RELEASE Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 or see Appendix E. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ---------- org.slf4j » slf4j-api 1.7.25 The MIT License Copyright (c) 2004-2016 Paul R. Holser, Jr. See Appendix G.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
springfox Project	springfox-swagger-ui 2.9.2 springfox-swagger-ui 3.0.0	Copyright 2015 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the license. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. APACHE 2.0 - See Appendix E It has the following open source dependencies: springfox-spring-web v2.9.2 : Copyright 2015 the original author or authors. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the license. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. APACHE 2.0 - See Appendix E see: https://github.com/springfox/springfox swagger-ui v 3.17.1 Copyright 2018 SmartBear Software Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the license. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. APACHE 2.0 - See Appendix E see https://github.com/swagger-api/swagger-ui/

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information

Pivotal Software, Inc	Spring Framework 5.3.21
	Spring Framework 5.3.23
		org.springframework 5.2.3.RELEASE
		## License
		The Spring Framework is released under version 2.0 of the [Apache License](https://www.apache.org/licenses/LICENSE-2.0).
		COPYRIGHT: Copyright (c) 2002-2019 Pivotal, Inc.
		LICENSE:
		APACHE 2.0 - See Appendix E
		==========
		SPRING FRAMEWORK ${version} SUBCOMPONENTS:
		Spring Framework ${version} includes a number of subcomponents with separate copyright notices and license terms. The product that includes this file does not necessarily use all the open source subcomponents referred to below. Your use of the source code for these subcomponents is subject to the terms and conditions of the following licenses.
		>>> ASM 4.0 (org.ow2.asm:asm:4.0, org.ow2.asm:asm-commons:4.0):
		Copyright (c) 2000-2011 INRIA, France Telecom All rights reserved.
		See Appendix M
		Copyright (c) 1999-2009, OW2 Consortium <https://www.ow2.org/>
		>>> CGLIB 3.0 (cglib:cglib:3.0):
		Per the LICENSE file in the CGLIB JAR distribution downloaded from https://sourceforge.net/projects/cglib/files/cglib3/3.0/cglib-3.0.jar/download, CGLIB 3.0 is licensed under the Apache License, version 2.0, the text of which is included above.
		==========
		To the extent any open source components are licensed under the EPL and/or other similar licenses that require the source code and/or modifications to source code to be made available (as would be noted above), you may obtain a copy of the source code corresponding to the binaries for such open source components and modifications thereto, if any, (the "Source Files"), by downloading the Source Files from https://spring.io/projects, Pivotal's website at https://network.pivotal.io/open-source, or by sending a request, with your name and address to: Pivotal Software, Inc., 875 Howard Street, 5th floor, San Francisco, CA 94103, Attention: General Counsel. All such requests should clearly specify: OPEN SOURCE FILES REQUEST, Attention General Counsel. Pivotal can mail a copy of the Source Files to you on a CD or equivalent physical medium.
		This offer to obtain a copy of the Source Files is valid for three years from the date you acquired this Software

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		product. Alternatively, the Source Files may accompany the Software. ========== Modules: spring-aop spring-aspects spring-beans spring-context-indexer spring-context-support spring-context spring-core spring-expression spring-framework-bom spring-instrument spring-jcl spring-jdbc spring-jms spring-messaging spring-orm spring-oxm spring-test spring-tx spring-web spring-webflux spring-webmvc spring-websocket org.springframework 5.2.3.RELEASE

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	spring-kafka 2.8.6 spring-kafka 2.9.2	=== ========== Public License Template ========== === This template is provided to help you identify and sort all information === required for the Public Licenses & Copyright Notices field. You do not === need to use or keep this template in place, as long as all details are === provided and organized in such a way that D&E Legal can understand what === belongs where. === === The template is sorted into three sections: copyright notices for the === TOP-LEVEL component, the license for the top-level component, and the === same information for all fourth-party dependencies. If you are not sure === about the difference between top-level and fourth-party dependencies, === please review the section on Fourth-Party Dependencies in the === Corporate Architecture Third-Party Approval FAQ at === https://confluence.oraclecorp.com/confluence/x/O4G_Bg . === We especially recommend reading "What information is required in the === Public Licenses & Copyright Notices field?" and "What is a copyright === notice? Where do I find it?" === ========== ========== ---------- Top-level license ---------- === Insert the full text of the top-level license(s) for the component here. === This is the license that covers the entire component. If the component === is offered under multiple licenses or a choice of licenses, enter all === of them. Do not enter only a URL. === ========== ========== APACHE 2.0 - See Appendix E */

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		---------- Fourth-party information ---------- === IF YOU ARE INCLUDING FOURTH-PARTY DEPENDENCIES IN THIS LT: === === For each fourth-party component, provide the copyright notices and === license text, clearly identifying to which component they belong. === You must include this for all dependencies, whether they are bundled === or downloaded separately, and whether or not you are using them. === For notices or license text that is shared across multiple components, === you may group the component names together, so that you do not need to === have multiple copies of the same license text, or indicate the license === type if the license text is already provided for another dependency. === For more guidance, see "How do I record fourth-party dependencies?" === in the Corporate Architecture Third Party Approval FAQ. === === If YOU ARE NOT INCLUDING FOURTH-PARTY DEPENDENCIES IN THIS LT, leave === this section blank. However, if you are seeking distribution, YOU MUST === have separate business approvals for each dependency. You may use the === "Fourth-Party Dependencies" section below to identify those other LTs. === ========== ========== == NAME OF DEPENDENCY 1 org.springframework:spring-context == License Type Apache License, Version 2.0 == Copyright Notices /* * Copyright 2002-2022 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License");

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- (separator)---------- == NAME OF DEPENDENCY 2 org.springframework:spring-aop == License Type Apache License, Version 2.0 == Copyright Notices /* * Copyright 2002-2022 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- (separator)----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		== NAME OF DEPENDENCY 3 org.springframework:spring-beans == License Type Apache License, Version 2.0 == Copyright Notices /* * Copyright 2002-2022 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- (separator)---------- == NAME OF DEPENDENCY 4 org.springframework:spring-core == License Type Apache License, Version 2.0 == Copyright Notices /* * Copyright 2002-2022 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 *

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ -------------------------------- (separator)-------------------------------- == NAME OF DEPENDENCY 5 org.springframework:spring-jcl == License Type Apache License, Version 2.0 == Copyright Notices /* * Copyright 2002-2022 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ -------------------------------- (separator)-------------------------------- == NAME OF DEPENDENCY 6 org.springframework:spring-expression == License Type Apache License, Version 2.0 == Copyright Notices

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		/* * Copyright 2002-2022 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- (separator)---------- == NAME OF DEPENDENCY 7 org.springframework:spring-messaging == License Type Apache License, Version 2.0 == Copyright Notices /* * Copyright 2002-2022 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* See the License for the specific language governing permissions and * limitations under the License. */ -------------------------------- (separator)---------- == NAME OF DEPENDENCY 8 org.springframework:spring-tx:jar == License Type Apache License, Version 2.0 == Copyright Notices /* * Copyright 2002-2022 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ -------------------------------- (separator)---------- == NAME OF DEPENDENCY 9 org.springframework.retry:spring-retry == License Type Apache License, Version 2.0 == Copyright Notices /* * Copyright 2002-2022 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License");

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		* you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ -------------------------------- (separator)---------- == NAME OF DEPENDENCY 10 org.apache.kafka:kafka-clients == License Type Apache License, Version 2.0 == Copyright Notices Copyright 2022 The Apache Software Foundation. -------------------------------- (separator)---------- == NAME OF DEPENDENCY 11 com.github.luben:zstd-jni == License Type LICENSE: Zstd-jni: JNI bindings to Zstd Library Copyright (c) 2015-present, Luben Karavelov/ All rights reserved. BSD License See Appendix M src/main/native/LICENSE: BSD License For Zstandard software Copyright (c) 2016-present, Facebook, Inc. All rights reserved. See Appendix M src/main/native/COPYING: GPLv2

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		== Copyright Notices Zstd-jni: JNI bindings to Zstd Library Copyright (c) 2015-present, Luben Karavelov/ All rights reserved. For Zstandard software Copyright (c) 2016-present, Facebook, Inc. All rights reserved. From README The code for these JNI bindings is licenced under 2-clause BSD license. The native Zstd library is licensed under 3-clause BSD license or GPL2. See the LICENSE file and LICENSE and COPYRIGHT in src/main/native for full copyright and conditions. --- (separator)---------- == NAME OF DEPENDENCY 12 org.lz4:lz4-java == License Type Apache License, Version 2.0 == Copyright Notices /* * Copyright 2020 Adrien Grand and the lz4-java contributors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ --- (separator)---------- == NAME OF DEPENDENCY 13

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		org.xerial.snappy:snappy-java == License Type Apache License, Version 2.0 == Copyright Notices / *---------- - * Copyright 2011 Taro L. Saito * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. *---------- -*/ ---------- (separator)---------- == NAME OF DEPENDENCY 14 com.google.code.findbugs:jsr305 == License Type From https://github.com/findbugsproject/findbugs/blob/master/findbugs/licenses/LICENSE-jsr305.txt The JSR-305 reference implementation (lib/jsr305.jar) is distributed under the terms of the New BSD license: http://www.opensource.org/licenses/bsd-license.php See the JSR-305 home page for more information: http://code.google.com/p/jsr-305/ From https://opensource.org/licenses/bsd-license.php: Copyright <YEAR> <COPYRIGHT HOLDER> See Appendix M == Copyright Notices Copyright (c) 2005 Brian Goetz

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Copyright (c) 2007-2009, JSR305 expert group --- (separator)---------- == NAME OF DEPENDENCY 15 org.slf4j:slf4j-api == License Type Copyright (c) 2004-2022 QOS.ch Sarl (Switzerland) All rights reserved. See Appendix G == Copyright Notices Copyright (c) 2004-2007 QOS.ch Sarl (Switzerland) All rights reserved. --- (separator)---------- == LICENSES == Text of license (Apache License, Version 2.0) Apache License, Version 2.0 APACHE 2.0 - See Appendix E == Text of license (GPLv2) GPLv2 GNU GENERAL PUBLIC LICENSE END OF TERMS AND CONDITIONS How to Apply These Terms to Your New Programs If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms. To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found. <one line to give the program's name and a brief idea of what it does.> Copyright (C) <year> <name of author> This program is free software; you can redistribute it and/or modify

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details. You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA. Also add information on how to contact you by electronic and paper mail. If the program is interactive, make it output a short notice like this when it starts in an interactive mode: Gnomovision version 69, Copyright (C) year name of author Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details. The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the program

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		`Gnomovision' (which makes passes at compilers) written by James Hacker. <signature of Ty Coon>, 1 April 1989 Ty Coon, President of Vice This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. TOP-LEVEL COPYRIGHT NOTICE for org.springframework.kafka:spring-kafka Apache License 2.0 ---------separator--------- TOP-LEVEL LICENSE TEXT for org.springframework.kafka:spring-kafka Apache License END OF TERMS AND CONDITIONS APPENDIX: How to apply the Apache License to your work. To apply the Apache License to your work, attach the following boilerplate notice, with the fields enclosed by brackets "[]" replaced with your own identifying information. (Don't include the brackets!) The text should be enclosed in the appropriate comment syntax for the file format. We also recommend that a file or class testData1 and description of purpose be included on the same "printed page" as the copyright notice for easier identification within third-party archives. Copyright [yyyy] [testData1 of copyright owner] Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		https://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --------Notice ---------- Spring for Apache Kafka Framework ${version} Copyright (c) 2016-${copyright} Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ---------separator--------- FOURTH-PARTY DEPENDENCY #1 org.springframework:spring-context:jar:5.3.20 FOURTH-PARTY DEPENDENCY #2 org.springframework:spring-aop:jar:5.3.20 FOURTH-PARTY DEPENDENCY #3 org.springframework:spring-beans:jar:5.3.20 FOURTH-PARTY DEPENDENCY #4 org.springframework:spring-core:jar:5.3.20 FOURTH-PARTY DEPENDENCY #5 org.springframework:spring-jcl:jar:5.3.20 FOURTH-PARTY DEPENDENCY #6 org.springframework:spring-expression:jar:5.3.20 FOURTH-PARTY DEPENDENCY #7 org.springframework:spring-messaging:jar:5.3.20 FOURTH-PARTY DEPENDENCY #8 org.springframework:spring-tx:jar:5.3.20 FOURTH-PARTY DEPENDENCY #9 org.springframework.retry:spring-retry:jar:1.3.3 FOURTH-PARTY DEPENDENCY #10 com.google.code.findbugs:jsr305:jar:3.0.2

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		FOURTH-PARTY DEPENDENCY #11 org.apache.kafka:kafka-clients:jar:3.1.1 FOURTH-PARTY DEPENDENCY #12 org.lz4:lz4-java:jar:1.8.0 FOURTH-PARTY DEPENDENCY #13 org.xerial.snappy:snappy-java:jar:1.1.8.4 COMMON COPYRIGHT NOTICES Apache License 2.0 COMMON LICENSE TEXT Same as TEXT mentioned under TOP-LEVEL License Text ----------Notice ---------- Spring Framework ${version} Copyright (c) 2002-${copyright} Pivotal, Inc. This product is licensed to you under the Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ---------separator--------- FOURTH-PARTY DEPENDENCY #14 com.github.luben:zstd-jni:jar:1.5.0-4 Zstd-jni: JNI bindings to Zstd Library Copyright (c) 2015-present, Luben Karavelov/ All rights reserved. BSD License See Appendix M ---------separator--------- FOURTH-PARTY DEPENDENCY #15 org.slf4j:slf4j-api:jar:1.7.36 Copyright (c) 2004-2017 QOS.ch All rights reserved. See Appendix G ---------separator---------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Pivotal Software, Inc	Spring Retry 1.3.3 Spring Retry 1.3.4	spring-retry 1.3.1 License: Apache License Version 2.0 Copyright notice: [3] License: [0] ***4th Party dependencies**** spring-core 5.3.6 License: Apache License Version 2.0 Copyright notice: [2] License: [0] spring-jcl 5.3.6 License: Apache License Version 2.0 Copyright notice: [2] License: [0] commons-logging 1.2 License: Apache License Version 2.0 Copyright notice: [1] License: [0] references: ================ Start of Reference [0] ================ APACHE 2.0 - See Appendix E ================ End of Reference [0] ================ ================ Start of Reference [1] ================ Apache Commons Logging Copyright 2003-2014 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ================ End of Reference [1] ================ ================ Start of Reference [2] ================ Spring Framework ${version} Copyright (c) 2002-${copyright} Pivotal, Inc. This product is licensed to you under the

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		Apache License, Version 2.0 (the "License"). You may not use this product except in compliance with the License. This product may include a number of subcomponents with separate copyright notices and license terms. Your use of the source code for these subcomponents is subject to the terms and conditions of the subcomponent's license, as noted in the license.txt file. ================ End of Reference [2] ================ ================ Start of Reference [3] ================ /* * Copyright 2014 the original author or authors. * * Licensed under the Apache License, Version 2.0 (the "License"); * you may not use this file except in compliance with the License. * You may obtain a copy of the License at * * https://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software * distributed under the License is distributed on an "AS IS" BASIS, * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. * See the License for the specific language governing permissions and * limitations under the License. */ ================ End of Reference [3] ================
tcpdump project	tcpdump 4.9.3-1 tcpdump 4.9.3-2 tcpdump 4.9.3-3	License: BSD See Appendix M .

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Apache	test-results-analyzer-plugin 0.4.0	Copyright (c) 2006, 2008 Junio C Hamano Copyright (C) 2011-2014 by Yehuda Katz Copyright (c) 2013 jQuery Foundation and other contributors Licensed MIT ---------separator--------- Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ APACHE 2.0 - See Appendix E
Markus Siemens	TinyDB 4.5.1 TinyDB 4.5.2	Copyright (C) 2013 Markus Siemens See Appendix G

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Tom Akehurst	WireMock 2.27.1	Copyright (C) 2011 Thomas Akehurst APACHE 2.0 - See Appendix E ++++++++++++++++++ ++++++++ 4th party dependencies ++++++++++ Jetty, v9.2.28.v20190418, EPL v1.0 & Apache 2.0 Copyright --------- All contributions are the property of the respective authors or of entities to which copyright has been assigned by the authors (eg. employer). Declared Project Licenses ------------------------ This artifacts of this project are made available under the terms of: * the Eclipse Public License v. 1.0 http://www.eclipse.org/legal/epl-v10.html SPDX-License-Identifier: EPL-1.0 or * the Apache License, Version 2.0 https://www.apache.org/licenses/LICENSE-2.0. SPDX-License-Identifier: Apache-2.0 ++++++++++++++++++++++ Guava, v20.0, Apache 2.0 /* * Copyright (C) 2012 The Guava Authors * * Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except * in compliance with the License. You may obtain a copy of the License at * * http://www.apache.org/licenses/LICENSE-2.0 * * Unless required by applicable law or agreed to in writing, software distributed under the License * is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express * or implied. See the License for the specific language governing permissions and limitations under * the License. */ ++++++++++++++++++

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		jackson.core, v2.11.0, Apache 2.0 ---------- Copyright from source code ---------- /* Jackson JSON-processor. * * Copyright (c) 2007- Tatu Saloranta, tatu.saloranta@iki.fi */ ---------- Apache License Version 2.0, January 2004 http://www.apache.org/licenses/ ++++++++++ httpclient, v4.5.12, Apache 2.0 Apache HttpComponents Client Copyright 1999-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). http://www.apache.org/licenses/LICENSE-2.0 ++++++++++ xmlunit, v2.7.0 , Apache 2.0 Copyright (c) 2001-2008,2010,2014-2016,2020 Jeff Martin, Tim Bacon All rights reserved. ++++++++++ json-path, v2.4.0, Apache 2.0 Copyright 2017 Jayway Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 ++++++++++ slf4j-api, v1.7.12, MIT Copyright (c) 2004-2008 QOS.ch All rights reserved. See Appendix G ++++++++++ commons-lang3, v3.7, Apache 2.0 commons-fileupload: v1.4, Apache 2.0 Copyright 2002-2018 The Apache Software Foundation This product includes software developed at

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		The Apache Software Foundation (http://www.apache.org/).

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
Joe Walnes	XStream 1.4.17	========== ========== ---------- Top-level license ---------- Copyright (c) 2003-2006, Joe Walnes Copyright (c) 2006-2020, XStream Committers All rights reserved. See Appendix M ========== ========== . . . ---------- Copyright notices ---------- Copyright (C) 2006 Joe Walnes. Copyright (C) 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2015, 2016, 2017, 2018, 2019, 2020, 2021 XStream committers. All rights reserved. The software in this package is published under the terms of the BSD style license a copy of which has been included with this distribution in the LICENSE.txt file.========== ========== . . . ---------- Fourth-party information ---------- 4th Party Component #1 xmlpull 4th Party Component #1 License: Public 4th Party Component #1 CopyRight Notice: ---------- XMLPULL API IS FREE ---------- All of the XMLPULL API source code, compiled code, and documentation contained in this distribution *except* for tests (see separate LICENSE_TESTS.txt) are in the Public Domain. XMLPULL API comes with NO WARRANTY or guarantee of fitness for any purpose. Initial authors: Stefan Haustein Aleksander Slominski 2001-12-12 ========== 4th Party Component #2: xpp3_min-1.1.4c 4th Party Component #2 License : CC0 1.0 Public Indiana University Extreme! Lab Software License, Version 1.2 Copyright (C) 2003 The Trustees of Indiana University. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1) All redistributions of source code must retain the above copyright notice, the list of authors in the original source code, this list of conditions and the disclaimer listed in this license; 2) All redistributions in binary form must reproduce the above copyright notice, this list of conditions and the disclaimer listed in this license in the documentation and/or other materials provided with the distribution; 3) Any documentation included with all redistributions must include the following acknowledgement: "This product includes software developed by the Indiana University Extreme! Lab. For further information please visit http://www.extreme.indiana.edu/" Alternatively, this acknowledgment may appear in the software itself, and wherever such third-party acknowledgments normally appear. 4) The name "Indiana University" or "Indiana University Extreme! Lab" shall not be used to endorse or

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		promote products derived from this software without prior written permission from Indiana University. For written permission, please contact http://www.extreme.indiana.edu/. 5) Products derived from this software may not use "Indiana University" name nor may "Indiana University" appear in their name, without prior written permission of the Indiana University. Indiana University provides no reassurances that the source code provided does not infringe the patent or any other intellectual property rights of any other entity. Indiana University disclaims any liability to any recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. LICENSEE UNDERSTANDS THAT SOFTWARE IS PROVIDED "AS IS" FOR WHICH NO WARRANTIES AS TO CAPABILITIES OR ACCURACY ARE MADE. INDIANA UNIVERSITY GIVES NO WARRANTIES AND MAKES NO REPRESENTATION THAT SOFTWARE IS FREE OF INFRINGEMENT OF THIRD PARTY PATENT, COPYRIGHT, OR OTHER PROPRIETARY RIGHTS. INDIANA UNIVERSITY MAKES NO WARRANTIES THAT SOFTWARE IS FREE FROM "BUGS", "VIRUSES", "TROJAN HORSES", "TRAP DOORS", "WORMS", OR OTHER HARMFUL CODE. LICENSEE ASSUMES THE ENTIRE RISK AS TO THE PERFORMANCE OF SOFTWARE AND/OR ASSOCIATED MATERIALS, AND TO THE PERFORMANCE AND VALIDITY OF INFORMATION GENERATED USING SOFTWARE. 4th Party Component #2 Copyright Notice: ---------- Copyright (c) 2003 Extreme! Lab, Indiana University. All rights reserved. This software is open source. See the bottom of this file for the license. $Id: MXParser.java,v 1.52 2006/11/09 18:29:37 aslom Exp $ ---------- 4th Party Component #3 io.github.x-stream:mxparser 4th Party Component #3 License: Indiana University Extreme! Lab Software License, Version 1.2 Copyright (C) 2003 The Trustees of Indiana University. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1) All redistributions of source code must retain the above copyright notice, the list of authors in the original source code, this list of conditions and the disclaimer listed in this license; 2) All redistributions in binary form must reproduce the above copyright notice, this list of conditions and the disclaimer listed in this license in the documentation and/or other materials provided with the distribution; 3) Any documentation included with all redistributions must include the following acknowledgement: "This product includes software developed by the Indiana University Extreme! Lab. For further information please visit http://

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		www.extreme.indiana.edu/" Alternatively, this acknowledgment may appear in the software itself, and wherever such third-party acknowledgments normally appear. 4) The name "Indiana University" or "Indiana University Extreme! Lab" shall not be used to endorse or promote products derived from this software without prior written permission from Indiana University. For written permission, please contact http://www.extreme.indiana.edu/. 5) Products derived from this software may not use "Indiana University" name nor may "Indiana University" appear in their name, without prior written permission of the Indiana University. Indiana University provides no reassurances that the source code provided does not infringe the patent or any other intellectual property rights of any other entity. Indiana University disclaims any liability to any recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. LICENSEE UNDERSTANDS THAT SOFTWARE IS PROVIDED "AS IS" FOR WHICH NO WARRANTIES AS TO CAPABILITIES OR ACCURACY ARE MADE. INDIANA UNIVERSITY GIVES NO WARRANTIES AND MAKES NO REPRESENTATION THAT SOFTWARE IS FREE OF INFRINGEMENT OF THIRD PARTY PATENT, COPYRIGHT, OR OTHER PROPRIETARY RIGHTS. INDIANA UNIVERSITY MAKES NO WARRANTIES THAT SOFTWARE IS FREE FROM "BUGS", "VIRUSES", "TROJAN HORSES", "TRAP DOORS", "WORMS", OR OTHER HARMFUL CODE. LICENSEE ASSUMES THE ENTIRE RISK AS TO THE PERFORMANCE OF SOFTWARE AND/OR ASSOCIATED MATERIALS, AND TO THE PERFORMANCE AND VALIDITY OF INFORMATION GENERATED USING SOFTWARE. ----------

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
OpenZipkin	Zipkin 2.21.2	Copyright 2015-2018 The OpenZipkin Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. --- Below are 4th party dependencies. org.jooq >> jooq, 3.11.9, apache 2.0 Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ++ spring-boot, 2.1.2.RELEASE, apache 2.0 --- Licensed to the Apache Software Foundation (ASF) under one or more contributor license agreements. See the NOTICE file distributed with this work for additional information regarding copyright ownership. The ASF licenses this file to you under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ++

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		okhttp3, 3.12.1, apache 2.0 Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ++ com.squareup.okio, 1.17.3, APACHE 2.0 Copyright 2013 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ++ com.squareup.moshi, 1.8.0, apache 2.0 Copyright 2015 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ++ com.google.auto.value, 1.6.3, apache 2.0 Copyright 2013 Google, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
		the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ++ log4j, 2.11.0, apache 2.0 Apache Log4j Copyright 1999-2017 Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/).

Table 3-1 (Cont.) Oracle Communications Cloud Native Core, Licensing Information

Provider	Component (s)	Licensing Information
OpenZipkin	zipkin-reporter-java 2.15.0	Copyright 2016-2018 The OpenZipkin Authors APACHE 2.0 - See Appendix E ++++++++++++++++++++++ Below 4th party dependency ++++++++++++++++++++++ com.squareup.okhttp3, 3.12.1, Apache 2.0 Copyright (C) 2013 Square, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License. ++++++++++++++++++++++ io.zipkin.zipkin2, 2.12.1, Apache 2.0 Copyright 2015-2018 The OpenZipkin Authors Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

A

GNU General Public License, Version 2 (GPL-2.0)

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Lesser General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have. You must make sure that they, too, receive or can get the source code. In addition, you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license, which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution, and modification follow.

Terms and Conditions for Copying, Distribution, And Modification

1. This License applies to any program or other work, which contains a notice placed by the copyright holder saying it may be distributed under the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say,

a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification.") Each licensee is addressed as "you."

Activities other than copying, distribution, and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

2. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

3. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a. You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.

b. You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.

c. If the modified program normally reads commands interactively when run, you must cause it, when started running for such interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, does not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

4. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

a. Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

b. Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c. Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

5. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

6. You are not required to accept this License, since you have not signed it. However, nothing else grants your permission to modify or distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

7. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute, or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

8. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies

directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

9. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

10. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions are similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License, which applies to it and "any later version," you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

11. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision is guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

No Warranty

1. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION.

2. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

B

GNU General Public License, Version 2 (GPL-2.1)

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. In addition, you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute, and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License does. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution, and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library." The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

Terms and Conditions for Copying, Distribution, And Modification

Terms and Conditions for Copying, Distribution, And Modification

1. This License Agreement applies to any software library or other program, which contains a notice placed by the copyright holder, or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you."

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library," below, refers to any such software library or work, which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification.")

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for

all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution, and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

2. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

3. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a. The modified work must itself be a software library.

b. You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c. You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d. If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, does not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

4. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to

this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

5. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

6. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library." Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library." The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

7. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include

the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a. Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b. Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) operates properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c. Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d. If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e. Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

8. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a. Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b. Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

9. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

10. You are not required to accept this License, since you have not signed it. However, nothing else grants your permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

11. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with, or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

12. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

13. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

14. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions are similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version," you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

15. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision is guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

No Warranty

16. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR, OR CORRECTION.

17. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

C

GNU Lesser General Public License, version 3 (LGPL-3)

This version of the GNU Lesser General Public License incorporates the terms and conditions of version 3 of the GNU General Public License, supplemented by the additional permissions listed below.

1. Additional Definitions.

As used herein, "this License" refers to version 3 of the GNU Lesser General Public License, and the "GNU GPL" refers to version 3 of the GNU General Public License.

"The Library" refers to a covered work governed by this License, other than an Application or a Combined Work as defined below.

An "Application" is any work that makes use of an interface provided by the Library, but which is not otherwise based on the Library. Defining a subclass of a class defined by the Library is deemed a mode of using an interface provided by the Library.

A "Combined Work" is a work produced by combining or linking an Application with the Library. The particular version of the Library with which the Combined Work was made is also called the "Linked Version."

The "Minimal Corresponding Source" for a Combined Work means the Corresponding Source for the Combined Work, excluding any source code for portions of the Combined Work that, considered in isolation, are based on the Application, and not on the Linked Version.

The "Corresponding Application Code" for a Combined Work means the object code and/or source code for the Application, including any data and utility programs needed for reproducing the Combined Work from the Application, but excluding the System Libraries of the Combined Work.

2. Exception to Section 3 of the GNU GPL.

You may convey a covered work under sections 3 and 4 of this License without being bound by section 3 of the GNU GPL.

3. Conveying Modified Versions.

If you modify a copy of the Library, and, in your modifications, a facility refers to a function or data to be supplied by an Application that uses the facility (other than as an argument passed when the facility is invoked), then you may convey a copy of the modified version:

a. under this License, provided that you make a good faith effort to ensure that, in the event an Application does not supply the function or data, the facility still operates, and performs whatever part of its purpose remains meaningful, or

b. under the GNU GPL, with none of the additional permissions of this License applicable to that copy.

4. Object Code Incorporating Material from Library Header Files.

The object code form of an Application may incorporate material from a header file that is part of the Library. You may convey such object code under terms of your choice, provided that, if the incorporated material is not limited to numerical parameters, data structure layouts and accessors, or small macros, inline functions and templates (ten or fewer lines in length), you do both of the following:

a. Give prominent notice with each copy of the object code that the Library is used in it and that the Library and its use are covered by this License.

b. Accompany the object code with a copy of the GNU GPL and this license document.

5. Combined Works.

You may convey a Combined Work under terms of your choice that, taken together, effectively do not restrict modification of the portions of the Library contained in the Combined Work and reverse engineering for debugging such modifications, if you also do each of the following:

a. Give prominent notice with each copy of the Combined Work that the Library is used in it and that the Library and its use are covered by this License.

b. Accompany the Combined Work with a copy of the GNU GPL and this license document.

c. For a Combined Work that displays copyright notices during execution, include the copyright notice for the Library among these notices, as well as a reference directing the user to the copies of the GNU GPL and this license document.

d. Do one of the following:

1. Convey the Minimal Corresponding Source under the terms of this License, and the Corresponding Application Code in a form suitable for, and under terms that permit, the user to recombine or relink the Application with a modified version of the Linked Version to produce a modified Combined Work, in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.

2. Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (a) uses at run time a copy of the Library already present on the user's computer system, and (b) will operate properly with a modified version of the Library that is interface-compatible with the Linked Version.

e. Provide Installation Information, but only if you would otherwise be required to provide such information under section 6 of the GNU GPL, and only to the extent that such information is necessary to install and execute a modified version of the Combined Work produced by recombining or relinking the Application with a modified version of the Linked Version. (If you use option 4d0, the Installation Information must accompany the Minimal Corresponding Source and Corresponding Application Code. If you use option 4d1, you must provide the Installation Information in the manner specified by section 6 of the GNU GPL for conveying Corresponding Source.)

6. Combined Libraries.

You may place library facilities that are a work based on the Library side by side in a single library together with other library facilities that are not Applications and are not covered by this License, and convey such a combined library under terms of your choice, if you do both of the following:

a. Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities, conveyed under the terms of this License.

1. b. Give prominent notice with the combined library that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

7. Revised Versions of the GNU Lesser General Public License.

The Free Software Foundation may publish revised and/or new versions of the GNU Lesser General Public License from time to time. Such new versions are similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library as you received it specifies that a certain numbered version of the GNU Lesser General Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that published version or of any later version published by the Free Software Foundation. If the Library as you received it does not specify a version number of the GNU Lesser General Public License, you may choose any version of the GNU Lesser General Public License ever published by the Free Software Foundation.

If the Library as you received, it specifies a proxy can decide whether future versions of the GNU Lesser General Public License shall apply, that proxy's public statement of acceptance of any version is permanent authorization for you to choose that version for the Library.

D

Apache License, Version 1.1 (Apache 1.1)

The Apache Software License, Version 1.1

Copyright (c) 2000 The Apache Software Foundation. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

3. The end-user documentation included with the redistribution, if any, must include the following acknowledgment:

"This product includes software developed by the Apache Software Foundation (http://www.apache.org/)." Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.

4. The names "Apache" and "Apache Software Foundation" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact apache@apache.org.

5. Products derived from this software may not be called "Apache," nor may "Apache" appear in their name, without prior written permission of the Apache Software Foundation.

THIS SOFTWARE IS PROVIDED ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE APACHE SOFTWARE FOUNDATION OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

==========

This software consists of voluntary contributions made by many individuals on behalf of the Apache Software Foundation. For more information on the Apache Software Foundation, please see <http://www.apache.org/>.

Portions of this software are based upon public domain software originally written at the National Center for Supercomputing Applications, University of Illinois, Urbana-Champaign

E

Apache License, version 2.0 (Apache 2.0)

1. Definitions.

"License" shall mean the terms and conditions for use, reproduction, and distribution as defined by Sections 1 through 9 of this document.

"Licensor" shall mean the copyright owner or entity authorized by the copyright owner that is granting the License.

"Legal Entity" shall mean the union of the acting entity and all other entities that control, are controlled by, or are under common control with that entity. For the purposes of this definition, "control" means (i) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (ii) ownership of fifty percent (50%) or more of the outstanding shares, or (iii) beneficial ownership of such entity.

"You" (or "Your") shall mean an individual or Legal Entity exercising permissions granted by this License.

"Source" form shall mean the preferred form for making modifications, including but not limited to software source code, documentation source, and configuration files.

"Object" form shall mean any form resulting from mechanical transformation or translation of a Source form, including but not limited to compiled object code, generated documentation, and conversions to other media types.

"Work" shall mean the work of authorship, whether in Source or Object form, made available under the License, as indicated by a copyright notice that is included in or attached to the work (an example is provided in the Appendix below).

"Derivative Works" shall mean any work, whether in Source or Object form, that is based on (or derived from) the Work and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship. For the purposes of this License, Derivative Works shall not include works that remain separable from, or merely link (or bind by name) to the interfaces of, the Work and Derivative Works thereof.

"Contribution" shall mean any work of authorship, including the original version of the Work and any modifications or additions to that Work or Derivative Works thereof, that is intentionally submitted to Licensor for inclusion in the Work by the copyright owner or by an individual or Legal Entity authorized to submit on behalf of the copyright owner. For the purposes of this definition, "submitted" means any form of electronic, verbal, or written communication sent to the Licensor or its representatives, including but not limited to communication on electronic mailing lists, source code control systems, and issue tracking systems that are managed by, or on behalf of, the Licensor for the purpose of discussing and improving the Work, but excluding communication that is conspicuously marked or otherwise designated in writing by the copyright owner as "Not a Contribution."

"Contributor" shall mean Licensor and any individual or Legal Entity on behalf of whom a Contribution has been received by Licensor and subsequently incorporated within the Work.

2. Grant of Copyright License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable copyright license to reproduce, prepare Derivative Works of, publicly display,

publicly perform, sublicense, and distribute the Work and such Derivative Works in Source or Object form.

3. Grant of Patent License. Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted. If You institute patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Work or a Contribution incorporated within the Work constitutes direct or contributory patent infringement, then any patent licenses granted to You under this License for that Work shall terminate as of the date such litigation is filed.

4. Redistribution. You may reproduce and distribute copies of the Work or Derivative Works thereof in any medium, with or without modifications, and in Source or Object form, provided You meet the following conditions:

a. You must give any other recipients of the Work or Derivative Works a copy of this License; and

b. You must cause any modified files to carry prominent notices stating that You changed the files; and

c. You must retain, in the Source form of any Derivative Works that You distribute, all copyright, patent, trademark, and attribution notices from the Source form of the Work, excluding those notices that do not pertain to any part of the Derivative Works; and

d. If the Work includes a "NOTICE" text file as part of its distribution, then any Derivative Works that You distribute must include a readable copy of the attribution notices contained within such NOTICE file, excluding those notices that do not pertain to any part of the Derivative Works, in at least one of the following places: within a NOTICE text file distributed as part of the Derivative Works; within the Source form or documentation, if provided along with the Derivative Works; or, within a display generated by the Derivative Works, if and wherever such third-party notices normally appear. The contents of the NOTICE file are for informational purposes only and do not modify the License. You may add your own attribution notices within Derivative Works that You distribute, alongside or as an addendum to the NOTICE text from the Work, provided such additional attribution notices cannot be construed as modifying the License. You may add your own copyright statement to your modifications and may provide additional or different license terms and conditions for use, reproduction, or distribution of your modifications, or for any such Derivative Works as a whole, provided your use, reproduction, and distribution of the Work otherwise complies with the conditions stated in this License.

5. Submission of Contributions. Unless you explicitly state otherwise, any Contribution intentionally submitted for inclusion in the Work by You to the Licensor shall be under the terms and conditions of this License, without any additional terms or conditions. Notwithstanding the above, nothing herein shall supersede or modify the terms of any separate license agreement you may have executed with Licensor regarding such Contributions.

6. Trademarks. This License does not grant permission to use the trade names, trademarks, service marks, or product names of the Licensor, except as required for reasonable and customary use in describing the origin of the Work and reproducing the content of the NOTICE file.

7. Disclaimer of Warranty. Unless required by applicable law or agreed to in writing, Licensor provides the Work (and each Contributor provides its Contributions) on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied, including, without limitation, any warranties or conditions of TITLE, NON-INFRINGEMENT, MERCHANTABILITY, or FITNESS FOR A PARTICULAR PURPOSE. You are solely responsible for determining the appropriateness of using or redistributing the Work and assume any risks associated with Your exercise of permissions under this License.

8. Limitation of Liability. In no event and under no legal theory, whether in tort (including negligence), contract, or otherwise, unless required by applicable law (such as deliberate and grossly negligent acts) or agreed to in writing, shall any Contributor be liable to You for damages, including any direct, indirect, special, incidental, or consequential damages of any character arising as a result of this License or out of the use or inability to use the Work (including but not limited to damages for loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses), even if such Contributor has been advised of the possibility of such damages.

9. Accepting Warranty or Additional Liability. While redistributing the Work or Derivative Works thereof, you may choose to offer, and charge a fee for, acceptance of support, warranty, indemnity, or other liability obligations and/or rights consistent with this License. However, in accepting such obligations, you may act only on Your own behalf and on Your sole responsibility, not on behalf of any other Contributor, and only if You agree to indemnify, defend, and hold each Contributor harmless for any liability incurred by, or claims asserted against, such Contributor by reason of your accepting any such warranty or additional liability.

F

The FreeBSD Project

(Required) Enter introductory text here, including the definition and purpose of the concept.

Copyright 1992-2017 The FreeBSD Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The views and conclusions contained in the software and documentation are those of the authors and should not be interpreted as representing official policies, either expressed or implied, of the FreeBSD Project.

G

The MIT License (MIT)

Copyright (c) <year> <copyright holders>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice are included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS," WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

H

Zlib License

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.

2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.

3. This notice may not be removed or altered from any source distribution.

ACE- 6.4.7 License

Copyright and Licensing Information for ACE(TM), TAO(TM), CIAO(TM), DAnCE(TM), and CoSMIC(TM)

ACE(TM), TAO(TM), CIAO(TM), DAnCE>(TM), and CoSMIC(TM) (henceforth referred to as "DOC software") are copyrighted by Douglas C. Schmidt and his research group at Washington University, University of California, Irvine, and Vanderbilt University, Copyright (c) 1993-2018, all rights reserved.

Since DOC software is open-source, freely available software, you are free to use, modify, copy, and distribute--perpetually and irrevocably--the DOC software source code and object code produced from the source, as well as copy and distribute modified versions of this software. You must, however, include this copyright statement along with any code built using DOC software that you release. No copyright statement needs to be provided if you just ship binary executables of your software products.

You can use DOC software in commercial and/or binary software releases and are under no obligation to redistribute any of your source code that is built using DOC software. Note, however, that you may not misappropriate the DOC software code, such as copyrighting it yourself or claiming authorship of the DOC software code, in a way that will prevent DOC software from being distributed freely using an open-source development model. You needn't inform anyone that you're using DOC software in your software, though we encourage you to let us know so we can promote your project in the DOC software success stories.

The ACE, TAO, CIAO, DAnCE, and CoSMIC web sites are maintained by the DOC Group at the Institute for Software Integrated Systems (ISIS) and the Center for Distributed Object Computing of Washington University, St. Louis for the development of open-source software as part of the open-source software community. Submissions are provided by the submitter ``as is'' with no warranties whatsoever, including any warranty of merchantability, noninfringement of third party intellectual property, or fitness for any particular purpose. In no event shall the submitter be liable for any direct, indirect, special, exemplary, punitive, or consequential damages, including without limitation, lost profits, even if advised of the possibility of such damages. Likewise, DOC software is provided as is with no warranties of any kind, including the warranties of design, merchantability, and fitness for a particular purpose, noninfringement, or arising from a course of dealing, usage or trade practice. Washington University, UC Irvine, Vanderbilt University, their employees, and students shall have no liability with respect to the infringement of copyrights, trade secrets or any patents by DOC software or any part thereof. Moreover, in no event will Washington University, UC Irvine, or Vanderbilt University, their employees, or students be liable for any lost revenue or profits or other special, indirect and consequential damages.

DOC software is provided with no support and without any obligation on the part of Washington University, UC Irvine, Vanderbilt University, their employees, or students to assist in its use, correction, modification, or enhancement. A number of companies around the world provide commercial support for DOC software, however. DOC software is Y2K-compliant, as long as the underlying OS platform is Y2K-compliant. Likewise, DOC software is compliant with the new US daylight savings rule passed by Congress as "The Energy Policy Act of 2005," which established new daylight savings times (DST) rules for the United States that expand DST as of March 2007. Since DOC software obtains time/date and

calendaring information from operating systems users will not be affected by the new DST rules as long as they upgrade their operating systems accordingly.

The names ACE(TM), TAO(TM), CIAO(TM), DAnCE(TM), CoSMIC(TM), Washington University, UC Irvine, and Vanderbilt University, may not be used to endorse or promote products or services derived from this source without express written permission from Washington University, UC Irvine, or Vanderbilt University. This license grants no permission to call products or services derived from this source ACE(TM), TAO(TM), CIAO(TM), DAnCE(TM), or CoSMIC(TM), nor does it grant permission for the name Washington University, UC Irvine, or Vanderbilt University to appear in their names.

J

ECLIPSE 1.0 License

Eclipse Public License - v 1.0

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS ECLIPSE PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1.DEFINITIONS

"Contribution" means:

a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and

b) in the case of each subsequent Contributor:

i) changes to the Program, and

ii) additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents " mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form. b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder. c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual

property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3.REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

a) it complies with the terms and conditions of this Agreement; and

b) its license agreement:

i) effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;

ii) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;

iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and

iv) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

a) it must be made available under this Agreement; and

b) a copy of this Agreement must be included with each copy of the Program. Contributors may not remove or alter any copyright notices contained within the Program.

Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4.COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product

offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7.GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one other than the Agreement Steward has the right to modify this Agreement.

The Eclipse Foundation is the initial Agreement Steward. The Eclipse Foundation may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

K

PHP License

==========

==========

File 1 of 38: LICENSE

==========

========== ----- The PHP License, version 3.01 Copyright (c) 1999 - 2010

The PHP Group. All rights reserved. ----------

Redistribution and use in source and binary forms, with or without modification, is permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. The name "PHP" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact group@php.net.
4. Products derived from this software may not be called "PHP", nor may "PHP" appear in their name, without prior written permission from group@php.net. You may indicate that your software works in conjunction with PHP by saying "Foo for PHP" instead of calling it "PHP Foo" or "phpfoo" 5. The PHP Group may publish revised and/or new versions of the license from time to time. Each version will be given a distinguishing version number. Once covered code has been published under a particular version of the license, you may always continue to use it under the terms of that version. You may also choose to use such covered code under the terms of any subsequent version of the license published by the PHP Group. No one other than the PHP Group has the right to modify the terms applicable to covered code created under this License. 6. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes PHP software, freely available from <http://www.php.net/software/>".

THIS SOFTWARE IS PROVIDED BY THE PHP DEVELOPMENT TEAM ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE PHP DEVELOPMENT TEAM OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION). HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE

. ----------

This software consists of voluntary contributions made by many individuals on behalf of the PHP Group. The PHP Group can be contacted via Email at group@php.net. For more information on the PHP Group and the PHP project, please see <http://www.php.net>. PHP includes the Zend Engine, freely available at<http://www.zend.com>.
========== File 2 of 38: config.GUESS
========== Copyright (C) 1984, 1989, 1990, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 Free Software Foundation, Inc. timestamp='2008-01-23' This file is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details. You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street - Fifth Floor, Boston, MA 02110-1301, USA. As a special exception to the GNU General Public License, if you distribute this file as part of a program that contains a configuration script generated by Autoconf, you may include it under the same distribution terms that you use for the rest of that program.
========== File 3 of 38: configure
========== Copyright (C) 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 Free Software Foundation, Inc. This configure script is free software; the Free Software Foundation gives unlimited permission to copy, distribute and modify it.
========== File 4 of 38: header
========== +--+ | Copyright (c) 1997-2013 The PHP Group | +--+ | This source file is subject to version 3.01 of the PHP license, | | that is bundled with this package in the file LICENSE, and is | | available through the world-wide-web at the following url: | | http://www.php.net/license/3_01.txt | | If you did not receive a copy of the PHP license and are unable to | | obtain it through the world-wide-web, please send a note to | | license@php.net so we can mail you a copy immediately. |
========== File 5 of 38: build/shtool
========== ## Copyright (c) 1994-2008 Ralf S. Engelschall <rse@engelschall.com> ## ## See http://www.gnu.org/software/shtool/ for more information. ## See ftp://ftp.gnu.org/gnu/shtool/ for latest version. ## ## Version: 2.0.8 (18-Jul-2008) ## Contents: 5/19 available modules ## This program is free software; you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details. You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 59 Temple Place - Suite 330, Boston, MA 02111-1307, USA, or

contact Ralf S. Engelschall <rse@engelschall.com>. NOTICE: Given that you include this file verbatim into your own source tree, you are justified in saying that it remains separate from your package, and that this way you are simply just using GNU shtool. So, in this situation, there is no requirement that your package itself is licensed under the GNU General Public License in order to take advantage of GNU shtool.

========== File 6 of 38: ext/bcmath/libbcmath/src/add.c ========== Copyright (C) 1991, 1992, 1993, 1994, 1997 Free Software Foundation, Inc. Copyright (C) 2000 Philip A. Nelson This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. (COPYING.LIB) You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to: The Free Software Foundation, Inc. 59 Temple Place, Suite 330 Boston, MA 02111-1307 USA.

========== File 7 of 38: ext/bcmath/libbcmath/COPYING.LIB ========== GNU LESSER GENERAL PUBLIC LICENSE Version 2.1, February 1999 Copyright (C) 1991, 1999 Free Software Foundation, Inc. 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed. [This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.] Preamble The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below. When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things. To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it. For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights. We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library. To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others. Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively

restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license. Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs. When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library. We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances. For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License. In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system. Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library. The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run. GNU LESSER GENERAL PUBLIC LICENSE TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION 0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you". A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables. The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".) "Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library. Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is

true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library. You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.
2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful. (For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.) These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it. Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library. In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

1. You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices. Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy. This option is useful when you wish to copy part of the code of the Library into a program that is not a library.
2. You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code,

which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange. If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

3. A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License. However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables. When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law. If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.) Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

4. As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications. You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things: a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.) b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with. c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution. d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials

from the same place. e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy. For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable. It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

5. You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things: a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above. b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

6. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

7. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.

8. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.

9. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library. If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances. It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in

reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice. This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

10. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

11. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation. 14. If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY 15. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION. 16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License). To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found. <one line to give the library's name

and a brief idea of what it does.> Copyright (C) <year> <name of author> This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 59 Temple Place, Suite 330, Boston, MA 02111-1307 USA Also add information on how to contact you by electronic and paper mail. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names: Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker. <signature of Ty Coon>, 1 April 1990 Ty Coon, President of Vice That's all there is to it!
========== File 8 of 38: ext/calendar: dow.c
========== * Copyright 1993-1995, Scott E. Lee, all rights reserved. * Permission granted to use, copy, modify, distribute and sell so long as * the above copyright and this permission statement are retained in all * copies. THERE IS NO WARRANTY - USE AT YOUR OWN RISK.
========== File 9 of 38: ext/ereg/regex/COPYRIGHT
========== Copyright 1992, 1993, 1994 Henry Spencer. All rights reserved. This software is not subject to any license of the American Telephone and Telegraph Company or of the Regents of the University of California. Permission is granted to anyone to use this software for any purpose on any computer system, and to alter it and redistribute it, subject to the following restrictions: 1. The author is not responsible for the consequences of use of this software, no matter how awful, even if they arise from flaws in it. 2. The origin of this software must not be misrepresented, either by explicit claim or by omission. Since few users ever read sources, credits must appear in the documentation. 3. Altered versions must be plainly marked as such, and must not be misrepresented as being the original software. Since few users ever read sources, credits must appear in the documentation. 4. This notice may not be removed or altered.
========== File 10 of 38: ext/fileinfo/libmagic/LICENSE
========== Author: Christos Zoulas <christos@zoulas.com> Download: ftp://ftp.astron.com/pub/file/ Files: * Copyright: (C) 1985-1995 Ian F. Darwin (C) 1994-2009 Christos Zoulas <christos@zoulas.com> License: BSD This software is not subject to any export provision of the United States Department of Commerce, and may be exported to any country or planet. . Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice immediately at the beginning of the file, without modification, this list of conditions, and the following disclaimer. . 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. . THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR

PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
========== File 11 of 38: ext/gd/libgd/COPYING
========== Portions copyright 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002 by Cold Spring Harbor Laboratory. Funded under Grant P41-RR02188 by the National Institutes of Health. Portions copyright 1996, 1997, 1998, 1999, 2000, 2001, 2002 by Boutell.Com, Inc. Portions relating to GD2 format copyright 1999, 2000, 2001, 2002 Philip Warner. Portions relating to PNG copyright 1999, 2000, 2001, 2002 Greg Roelofs. Portions relating to gdttf.c copyright 1999, 2000, 2001, 2002 John Ellson (ellson@lucent.com). Portions relating to gdft.c copyright 2001, 2002 John Ellson (ellson@lucent.com). Portions copyright 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007 2008, 2009 Pierre-Alain Joye (pierre@libgd.org). Portions relating to JPEG and to color quantization copyright 2000, 2001, 2002, Doug Becker and copyright (C) 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, Thomas G. Lane. This software is based in part on the work of the Independent JPEG Group. See the file README-JPEG.TXT for more information. Portions relating to WBMP copyright 2000, 2001, 2002 Maurice Szmurlo and Johan Van den Brande. Permission has been granted to copy, distribute and modify gd in any context without fee, including a commercial application, provided that this notice is present in user-accessible supporting documentation. This does not affect your ownership of the derived work itself, and the intent is to assure proper credit for the authors of gd, not to interfere with your productive use of gd. If you have questions, ask. "Derived works" includes all programs that utilize the library. Credit must be given in user-accessible documentation. This software is provided "AS IS." The copyright holders disclaim all warranties, either express or implied, including but not limited to implied warranties of merchantability and fitness for a particular purpose, with respect to this code and accompanying documentation. Although their code does not appear in gd, the authors wish to thank David Koblas, David Rowley, and Hutchison Avenue Software Corporation for their prior contributions.
========== File 12 of 38: ext/gd/libgd/README
========== This directory contains the GD library available from http://www.boutell.com/gd/ The inclusion of this library with PHP is in response to the popularity of the GD extension and the GD library itself. We felt it would be worthwhile to make sure everyone had access to the features of GD and by bundling GD with PHP we have a known target to work against. In addition to the above, a number of motivated PHP hackers have expressed an interest in extending the functionality of the PHP-GD combination. By putting a version of GD into PHP CVS we have provided a sandbox for them to throw sand at each other in. Any and all improvements we make to the GD library will be contributed back to the original maintainers of this library at boutell.com. The following statement is from the original GD package: Credits and license terms In order to resolve any possible confusion regarding the authorship of gd, the following copyright statement covers all of the authors who have required such a statement. _If you are aware of any oversights in this copyright notice, please contact Thomas Boutell who will be pleased to correct them._ COPYRIGHT STATEMENT FOLLOWS THIS LINE Portions copyright 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001 by Cold Spring Harbor Laboratory. Funded under Grant P41-RR02188 by the National Institutes of Health. Portions copyright 1996, 1997, 1998, 1999, 2000, 2001 by Boutell.Com, Inc. Portions relating to GD2 format copyright 1999,

2000 Philip Warner. Portions relating to PNG copyright 1999, 2000 Greg Roelofs. Portions relating to libttf copyright 1999, 2000 John Ellson (ellson@lucent.com). Portions relating to JPEG and to color quantization copyright 2000, Doug Becker and copyright (C) 1994-1998, Thomas G. Lane. This software is based in part on the work of the Independent JPEG Group. See the file README-JPEG.TXT for more information. Portions relating to WBMP copyright 2000 Maurice Szmurlo and Johan Van den Brande. _Permission has been granted to copy, distribute and modify gd in any context without fee, including a commercial application, provided that this notice is present in user-accessible supporting documentation._ This does not affect your ownership of the derived work itself, and the intent is to assure proper credit for the authors of gd, not to interfere with your productive use of gd. If you have questions, ask. "Derived works" includes all programs that utilize the library. Credit must be given in user-accessible documentation. _This software is provided "AS IS."_ The copyright holders disclaim all warranties, either express or implied, including but not limited to implied warranties of merchantability and fitness for a particular purpose, with respect to this code and accompanying documentation. Although their code does not appear in gd 2.0.1, the authors wish to thank David Koblas, David Rowley, and Hutchison Avenue Software Corporation for their prior contributions. END OF COPYRIGHT STATEMENT
==========
========== File 13 of 38: ext/gd/libgd/webpimg.c
==========
========== - Copyright 2010 Google Inc. - - This code is licensed under the same terms as WebM: - Software License Agreement: http://www.webmproject.org/license/software/ - Additional IP Rights Grant: http://www.webmproject.org/license/additional/
==========
========== File 14 of 38: http://www.webmproject.org/license/software/
==========
========== Software License Copyright (c) 2010, Google Inc. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. Neither the name of Google nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
==========
========== File 15 of 38: http://www.webmproject.org/license/additional/
==========
========== Additional IP Rights Grant (Patents) "These implementations" means the copyrightable works that implement the WebM codecs distributed by Google as part of the WebM Project. Google hereby grants to you a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, transfer, and otherwise run, modify and propagate the contents of these implementations of WebM, where such license applies only to those patent claims, both currently owned by Google and acquired in the future, licensable by

Google that are necessarily infringed by these implementations of WebM. This grant does not include claims that would be infringed only as a consequence of further modification of these implementations. If you or your agent or exclusive licensee institute or order or agree to the institution of patent litigation or any other patent enforcement activity against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that any of these implementations of WebM or any code incorporated within any of these implementations of WebM constitutes direct or contributory patent infringement, or inducement of patent infringement, then any patent rights granted to you under this License for these implementations of WebM shall terminate as of the date such litigation is filed.
========== File 16 of 38: ext/json/JSON_parser.c
========== Copyright (c) 2005 JSON.org Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. The Software shall be used for Good, not Evil. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.
========== File 17 of 38: ext/mbstring/libmbfl/filters/cp932_table.h
========== * Copyright (c) 1998-2002 HappySize, Inc. All rights reserved. * * LICENSE NOTICES * * This file is part of "streamable kanji code filter and converter", * which is distributed under the terms of GNU Lesser General Public * License (version 2) as published by the Free Software Foundation. * * This software is distributed in the hope that it will be useful, * but WITHOUT ANY WARRANTY; without even the implied warranty of * MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the * GNU Lesser General Public License for more details. * * You should have received a copy of the GNU Lesser General Public * License along with "streamable kanji code filter and converter"; * if not, write to the Free Software Foundation, Inc., 59 Temple Place, * Suite 330, Boston, MA 02111-1307 USA
========== File 18 of 38: ext/mbstring/oniguruma/enc/ascii.c
========== * Copyright (c) 2002-2007 K.Kosako <sndgk393 AT ybb DOT ne DOT jp> * All rights reserved. * * Redistribution and use in source and binary forms, with or without * modification, are permitted provided that the following conditions * are met: * 1. Redistributions of source code must retain the above copyright * notice, this list of conditions and the following disclaimer. * 2. Redistributions in binary form must reproduce the above copyright * notice, this list of conditions and the following disclaimer in the * documentation and/or other materials provided with the distribution. * * THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS'' AND * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS

FOR A PARTICULAR PURPOSE * ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF * SUCH DAMAGE.
==========
========== File 19 of 38: ext/mbstring/oniguruma/enc/gb18030.c
==========
========== * Copyright (c) 2005 KUBO Takehiro <kubo AT jiubao DOT org> * K.Kosako <sndgk393 AT ybb DOT ne DOT jp> * All rights reserved. * * Redistribution and use in source and binary forms, with or without * modification, are permitted provided that the following conditions * are met: * 1. Redistributions of source code must retain the above copyright * notice, this list of conditions and the following disclaimer. * 2. Redistributions in binary form must reproduce the above copyright * notice, this list of conditions and the following disclaimer in the * documentation and/or other materials provided with the distribution. * * THIS SOFTWARE IS PROVIDED BY THE AUTHOR AND CONTRIBUTORS ``AS IS'' AND * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE * ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF * SUCH DAMAGE.
==========
========== File 20 of 38: ext/mbstring/ucgendat/OPENLDAP_LICENSE
==========
========== The OpenLDAP Public License Version 2.8, 17 August 2003 Redistribution and use of this software and associated documentation ("Software"), with or without modification, are permitted provided that the following conditions are met: 1. Redistributions in source form must retain copyright statements and notices, 2. Redistributions in binary form must reproduce applicable copyright statements and notices, this list of conditions, and the following disclaimer in the documentation and/or other materials provided with the distribution, and 3. Redistributions must contain a verbatim copy of this document. The OpenLDAP Foundation may revise this license from time to time. Each revision is distinguished by a version number. You may use this Software under terms of this license revision or under the terms of any subsequent revision of the license. THIS SOFTWARE IS PROVIDED BY THE OPENLDAP FOUNDATION AND ITS CONTRIBUTORS ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OPENLDAP FOUNDATION, ITS CONTRIBUTORS, OR THE AUTHOR(S) OR OWNER(S) OF THE SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. The names of the authors and copyright holders must not be used in advertising or otherwise to promote the sale, use or

other dealing in this Software without specific, written prior permission. Title to copyright in this Software shall at all times remain with copyright holders. OpenLDAP is a registered trademark of the OpenLDAP Foundation. Copyright 1999-2003 The OpenLDAP Foundation, Redwood City, California, USA. All Rights Reserved. Permission to copy and distribute verbatim copies of this document is granted. ========== File 21 of 38: ext/mbstring/ucgendat/ucgendat ========== * Copyright 1998-2007 The OpenLDAP Foundation. * All rights reserved. * * Redistribution and use in source and binary forms, with or without * modification, are permitted only as authorized by the OpenLDAP * Public License. * * A copy of this license is available at * <http://www.OpenLDAP.org/license.html>. */ /* Copyright 2001 Computing Research Labs, New Mexico State University * * Permission is hereby granted, free of charge, to any person obtaining a * copy of this software and associated documentation files (the "Software"), * to deal in the Software without restriction, including without limitation * the rights to use, copy, modify, merge, publish, distribute, sublicense, * and/or sell copies of the Software, and to permit persons to whom the * Software is furnished to do so, subject to the following conditions: * * The above copyright notice and this permission notice shall be included in * all copies or substantial portions of the Software. * * THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR * IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, * FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL * THE COMPUTING RESEARCH LAB OR NEW MEXICO STATE UNIVERSITY BE LIABLE FOR ANY * CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT * OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR * THE USE OR OTHER DEALINGS IN THE SOFTWARE. ========== File 22 of 38: ext/pcre/pcrelib/LICENSE ========== PCRE LICENCE ------------ PCRE is a library of functions to support regular expressions whose syntax and semantics are as close as possible to those of the Perl 5 language. Release 8 of PCRE is distributed under the terms of the "BSD" licence, as specified below. The documentation for PCRE, supplied in the "doc" directory, is distributed under the same terms as the software itself. The basic library functions are written in C and are freestanding. Also included in the distribution is a set of C++ wrapper functions, and a just-in-time compiler that can be used to optimize pattern matching. These are both optional features that can be omitted when the library is built. THE BASIC LIBRARY FUNCTIONS --------------------------- Written by: Philip Hazel Email local part: ph10 Email domain: cam.ac.uk University of Cambridge Computing Service, Cambridge, England. Copyright (c) 1997-2012 University of Cambridge All rights reserved. PCRE JUST-IN-TIME COMPILATION SUPPORT ---------------------------------- Written by: Zoltan Herczeg Email local part: hzmester Emain domain: freemail.hu Copyright(c) 2010-2012 Zoltan Herczeg All rights reserved. STACK-LESS JUST-IN-TIME COMPILER ------------------------------- Written by: Zoltan Herczeg Email local part: hzmester Emain domain: freemail.hu Copyright(c) 2009-2012 Zoltan Herczeg All rights reserved. THE C++ WRAPPER FUNCTIONS ------------------------ Contributed by: Google Inc. Copyright (c) 2007-2012, Google Inc. All rights reserved. THE "BSD" LICENCE ----------------- Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the

distribution. * Neither the name of the University of Cambridge nor the name of Google Inc. nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. End
==========
========== File 23 of 38: ext/standard/html_tables/mappings/8859-1.txt
==========
========== # Copyright (c) 1991-1999 Unicode, Inc. All Rights reserved. # # This file is provided as-is by Unicode, Inc. (The Unicode Consortium). # No claims are made as to fitness for any particular purpose. No # warranties of any kind are expressed or implied. The recipient # agrees to determine applicability of information provided. If this # file has been provided on optical media by Unicode, Inc., the sole # remedy for any claim will be exchange of defective media within 90 # days of receipt. # # Unicode, Inc. hereby grants the right to freely use the information # supplied in this file in the creation of products supporting the # Unicode Standard, and to make copies of this file in any form for # internal or external distribution as long as this notice remains # attached.
==========
========== File 24 of 38: ext/standard/html_tables/mappings/ROMAN.txt
==========
========== # Copyright: (c) 1994-2002, 2005 by Apple Computer, Inc., all rights # reserved. # # Standard header: # ---------- # # Apple, the Apple logo, and Macintosh are trademarks of Apple # Computer, Inc., registered in the United States and other countries. # Unicode is a trademark of Unicode Inc. For the sake of brevity, # throughout this document, "Macintosh" can be used to refer to # Macintosh computers and "Unicode" can be used to refer to the # Unicode standard. # # Apple Computer, Inc. ("Apple") makes no warranty or representation, # either express or implied, with respect to this document and the # included data, its quality, accuracy, or fitness for a particular # purpose. In no event will Apple be liable for direct, indirect, # special, incidental, or consequential damages resulting from any # defect or inaccuracy in this document or the included data.
==========
========== File 25 of 38: ext/standard/strnatcmp.c
==========
========== Copyright (C) 2000 by Martin Pool <mbp@humbug.org.au> This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software. Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions: 1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required. 2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software. 3. This notice may not be removed or altered from any source distribution.
==========
========== File 26 of 38: ext/xmlrpc/libxmlrpc/encodings.c
==========

========== Copyright 2000-2001 Epinions, Inc. Subject to the following 3 conditions, Epinions, Inc. permits you, free of charge, to (a) use, copy, distribute, modify, perform and display this software and associated documentation files (the "Software"), and (b) permit others to whom the Software is furnished to do so as well. 1) The above copyright notice and this permission notice shall be included without modification in all copies or substantial portions of the Software. 2) THE SOFTWARE IS PROVIDED "AS IS", WITHOUT ANY WARRANTY OR CONDITION OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF ACCURACY, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. 3) IN NO EVENT SHALL EPINIONS, INC. BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOST PROFITS ARISING OUT OF OR IN CONNECTION WITH THE SOFTWARE (HOWEVER ARISING, INCLUDING NEGLIGENCE), EVEN IF EPINIONS, INC. IS AWARE OF THE POSSIBILITY OF SUCH DAMAGES.
========== ========== File 27 of 38: ext/zip/lib/zip.h
========== ========== Copyright (C) 1999-2011 Dieter Baron and Thomas Klausner This file is part of libzip, a library to manipulate ZIP archives. The authors can be contacted at <libzip@nih.at> Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. 3. The names of the authors may not be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE AUTHORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
========== ========== File 28 of 38: main/mergesort.c
========== ========== * Copyright (c) 1989-1994 * The Regents of the University of California. All rights reserved. * * This code is derived from software contributed to Berkeley by * Peter McIlroy. * * Redistribution and use in source and binary forms, with or without * modification, are permitted provided that the following conditions * are met: * 1. Redistributions of source code must retain the above copyright * notice, this list of conditions and the following disclaimer. * 2. Redistributions in binary form must reproduce the above copyright * notice, this list of conditions and the following disclaimer in the * documentation and/or other materials provided with the distribution. * 3. All advertising materials mentioning features or use of this software * must display the following acknowledgement: * This product includes software developed by the University of * California, Berkeley and its contributors. * 4. Neither the name of the University nor the names of its contributors * may be used to endorse or promote products derived from this software * without specific prior written permission. * * THIS

SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND * ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE * IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE * ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE * FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL * DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS * OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) * HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT * LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY * OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF * SUCH DAMAGE.
==========
========== File 29 of 38: sapi/cli/php_http_parser.c
==========
========== /* Copyright 2009,2010 Ryan Dahl <ry@tinyclouds.org> * * Permission is hereby granted, free of charge, to any person obtaining a copy * of this software and associated documentation files (the "Software"), to * deal in the Software without restriction, including without limitation the * rights to use, copy, modify, merge, publish, distribute, sublicense, and/or * sell copies of the Software, and to permit persons to whom the Software is * furnished to do so, subject to the following conditions: * * The above copyright notice and this permission notice shall be included in * all copies or substantial portions of the Software. * * THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR * IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, * FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE * AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER * LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING * FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS * IN THE SOFTWARE.
==========
========== File 30 of 38: sapi/fpm/fpm/fpm_log.c
==========
========== /* (c) 2009 Jerome Loyet */
==========
========== File 31 of 38: sapi/fpm/LICENSE
==========
========== Copyright (c) 2004-2009, Andrei Nigmatulin All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. THIS SOFTWARE IS PROVIDED BY AUTHOR AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
==========
========== File 32 of 38: TSRM/LICENSE

========== Copyright (c) 1999-2011, Andi Gutmans, Sascha Schumann, Zeev Suraski. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: - Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. - Neither name of the copyright holders nor the names of their contributors may be used to endorse or promote products derived from this software without specific prior written permission. THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDERS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
========== File 33 of 38: TSRM/trheads.M4
========== Copyright (c) 1999, 2000 Sascha Schumann. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. THIS SOFTWARE IS PROVIDED BY SASCHA SCHUMANN ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL SASCHA SCHUMANN OR HIS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
========== File 34 of 38: win32/flock.c
========== * Copyright 1996-1997 by the University of Washington * * Permission to use, copy, modify, and distribute this software and its * documentation for any purpose and without fee is hereby granted, provided * that the above copyright notice appears in all copies and that both the * above copyright notice and this permission notice appear in supporting * documentation, and that the name of the University of Washington not be * used in advertising or publicity pertaining to distribution of the software * without specific, written prior permission. This software is made available * "as is", and * THE UNIVERSITY OF WASHINGTON DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, * WITH REGARD TO THIS SOFTWARE, INCLUDING WITHOUT LIMITATION ALL IMPLIED * WARRANTIES OF

MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND IN * NO EVENT SHALL THE UNIVERSITY OF WASHINGTON BE LIABLE FOR ANY SPECIAL, * INDIRECT OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM * LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, TORT * (INCLUDING NEGLIGENCE) OR STRICT LIABILITY, ARISING OUT OF OR IN CONNECTION * WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.
== File 35 of 38: win32/php_stdint.h
== // Copyright (c) 2006-2009 Alexander Chemeris // // Redistribution and use in source and binary forms, with or without // modification, are permitted provided that the following conditions are met: // // 1. Redistributions of source code must retain the above copyright notice, // this list of conditions and the following disclaimer. // // 2. Redistributions in binary form must reproduce the above copyright // notice, this list of conditions and the following disclaimer in the // documentation and/or other materials provided with the distribution. // // 3. The name of the author may be used to endorse or promote products // derived from this software without specific prior written permission. // // THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS'' AND ANY EXPRESS OR IMPLIED // WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF // MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO // EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, // SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, // PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; // OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, // WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR // OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF // ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
== File 36 of 38: Zend/LICENSE
== ---------- The Zend Engine License, Version 2.00 Copyright (c) 1999-2006 Zend Technologies Ltd. All rights reserved. ---------- Redistribution and use in source and binary forms, with or without modification, is permitted provided that the following conditions are met: 1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. 2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. 3. The names "Zend" and "Zend Engine" must not be used to endorse or promote products derived from this software without prior permission from Zend Technologies Ltd. For written permission, please contact license@zend.com. 4. Zend Technologies Ltd. may publish revised and/or new versions of the license from time to time. Each version will be given a distinguishing version number. Once covered code has been published under a particular version of the license, you may always continue to use it under the terms of that version. You may also choose to use such covered code under the terms of any subsequent version of the license published by Zend Technologies Ltd. No one other than Zend Technologies Ltd. has the right to modify the terms applicable to covered code created under this License. 5. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes the Zend Engine, freely available at http://www.zend.com" 6. All advertising materials mentioning features or use of this software must display the following acknowledgment: "The Zend Engine is freely available at http://www.zend.com" THIS SOFTWARE IS PROVIDED BY ZEND TECHNOLOGIES LTD. ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED.

IN NO EVENT SHALL ZEND TECHNOLOGIES LTD. BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

==========

File 37 of 38: Zend/header

==========

| Copyright (c) 1998-2013 Zend Technologies Ltd. (http://www.zend.com) | +----------+ | This source file is subject to version 2.00 of the Zend license, | | that is bundled with this package in the file LICENSE, and is | | available through the world-wide-web at the following url: | | http://www.zend.com/license/2_00.txt. | | If you did not receive a copy of the Zend license and are unable to | | obtain it through the world-wide-web, please send a note to | | license@zend.com so we can mail you a copy immediately.

==========

File 38 of 38: Zend/zend_strtod.c

==========

* Copyright (c) 1991 by AT&T. * * Permission to use, copy, modify, and distribute this software for any * purpose without fee is hereby granted, provided that this entire notice * is included in all copies of any software which is or includes a copy * or modification of this software and in all copies of the supporting * documentation for such software. * * THIS SOFTWARE IS BEING PROVIDED "AS IS", WITHOUT ANY EXPRESS OR IMPLIED * WARRANTY. IN PARTICULAR, NEITHER THE AUTHOR NOR AT&T MAKES ANY * REPRESENTATION OR WARRANTY OF ANY KIND CONCERNING THE MERCHANTABILITY * OF THIS SOFTWARE OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

L

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE Version 1.0

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE Version 1.0 (CDDL-1.0) ( )

1. Definitions.

- **1.1. Contributor** means each individual or entity that creates or contributes to the creation of Modifications.
- **1.2. Contributor Version** means the combination of the Original Software, prior Modifications used by a Contributor (if any), and the Modifications made by that particular Contributor.
- **1.3. Covered Software** means (a) the Original Software, or (b) Modifications, or (c) the combination of files containing Original Software with files containing Modifications, in each case including portions thereof.
- **1.4. Executable** means the Covered Software in any form other than Source Code.
- **1.5. Initial Developer** means the individual or entity that first makes Original Software available under this License.
- **1.6. Larger Work** means a work which combines Covered Software or portions thereof with code not governed by the terms of this License.
- **1.7. License** means this document.
- **1.8. Licensable** means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.
- **1.9. Modifications** means the Source Code and Executable form of any of the following:
  - **A.** Any file that results from an addition to, deletion from or modification of the contents of a file containing Original Software or previous Modifications;
  - **B.** Any new file that contains any part of the Original Software or previous Modification; or
  - **C.** Any new file that is contributed or otherwise made available under the terms of this License.
- **1.10. Original Software** means the Source Code and Executable form of computer software code that is originally released under this License.
- **1.11. Patent Claims** means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.
- **1.12. Source Code** means (a) the common form of computer software code in which modifications are made and (b) associated documentation included in or with such code.
- **1.13. You (or Your)** means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, You includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, control means (a) the power, direct or indirect, to cause the direction or

management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

2. License Grants.

- **2.1. The Initial Developer Grant.** Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, the Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license:
  - **(a)** under intellectual property rights (other than patent or trademark) Licensable by Initial Developer, to use, reproduce, modify, display, perform, sublicense and distribute the Original Software (or portions thereof), with or without Modifications, and/or as part of a Larger Work; and
  - **(b)** under Patent Claims infringed by the making, using or selling of Original Software, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Software (or portions thereof).
  - **(c)** The licenses granted in Sections 2.1(a) and (b) are effective on the date Initial Developer first distributes or otherwise makes the Original Software available to a third party under the terms of this License.
  - **(d)** Notwithstanding Section 2.1(b) above, no patent license is granted: (1) for code that You delete from the Original Software, or (2) for infringements caused by: (i) the modification of the Original Software, or (ii) the combination of the Original Software with other software or devices.
- **2.2. Contributor Grant.**

Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

- **(a)** under intellectual property rights (other than patent or trademark) Licensable by Contributor to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof), either on an unmodified basis, with other Modifications, as Covered Software and/or as part of a Larger Work; and
- **(b)** under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: (1) Modifications made by that Contributor (or portions thereof); and (2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).
- **(c)** The licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first distributes or otherwise makes the Modifications available to a third party.
- **(d)** Notwithstanding Section 2.2(b) above, no patent license is granted: (1) for any code that Contributor has deleted from the Contributor Version; (2) for infringements caused by: (i) third party modifications of Contributor Version, or (ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or (3) under Patent Claims infringed by Covered Software in the absence of Modifications made by that Contributor.

3. Distribution Obligations.

- **3.1. Availability of Source Code.**

Any Covered Software that You distribute or otherwise make available in Executable form must also be made available in Source Code form and that Source Code form must be distributed only under the terms of this License. You must include a copy of this License with every copy of the Source Code form of the Covered Software You distribute or otherwise make available. You must inform recipients of any such Covered Software in Executable form as to how they can obtain such Covered Software in Source Code form in a reasonable manner on or through a medium customarily used for software exchange.

- **3.2. Modifications.**

The Modifications that You create or to which You contribute are governed by the terms of this License. You represent that You believe Your Modifications are Your original creation(s) and/or You have sufficient rights to grant the rights conveyed by this License.

- **3.3. Required Notices.**

You must include a notice in each of Your Modifications that identifies You as the Contributor of the Modification. You may not remove or alter any copyright, patent or trademark notices contained within the Covered Software, or any notices of licensing or any descriptive text giving attribution to any Contributor or the Initial Developer.

- **3.4. Application of Additional Terms.**

You may not offer or impose any terms on any Covered Software in Source Code form that alters or restricts the applicable version of this License or the recipients rights hereunder. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, you may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear that any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

- **3.5. Distribution of Executable Versions.**

You may distribute the Executable form of the Covered Software under the terms of this License or under the terms of a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable form does not attempt to limit or alter the recipients rights in the Source Code form from the rights set forth in this License. If You distribute the Covered Software in Executable form under a different license, You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

- **3.6. Larger Works.**

You may create a Larger Work by combining Covered Software with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Software.

4. Versions of the License.

- **4.1. New Versions.**

Sun Microsystems, Inc. is the initial license steward and may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version

number. Except as provided in Section 4.3, no one other than the license steward has the right to modify this License.

- **4.2. Effect of New Versions.**

You may always continue to use, distribute or otherwise make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. If the Initial Developer includes a notice in the Original Software prohibiting it from being distributed or otherwise made available under any subsequent version of the License, You must distribute and make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. Otherwise, You may also choose to use, distribute or otherwise make the Covered Software available under the terms of any subsequent version of the License published by the license steward.

- **4.3. Modified Versions.**

When You are an Initial Developer and You want to create a new license for Your Original Software, You may create and use a modified version of this License if You: (a) rename the license and remove any references to the name of the license steward (except to note that the license differs from this License); and (b) otherwise make it clear that the license contains terms which differ from this License.

5. DISCLAIMER OF WARRANTY.

COVERED SOFTWARE IS PROVIDED UNDER THIS LICENSE ON AN AS IS BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED SOFTWARE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGING. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED SOFTWARE IS WITH YOU. SHOULD ANY COVERED SOFTWARE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED SOFTWARE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER.

6. TERMINATION.

- **6.1.** This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive.
- **6.2.** If You assert a patent infringement claim (excluding declaratory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You assert such claim is referred to as Participant) alleging that the Participant Software (meaning the Contributor Version where the Participant is a Contributor or the Original Software where the Participant is the Initial Developer) directly or indirectly infringes any patent, then any and all rights granted directly or indirectly to You by such Participant, the Initial Developer (if the Initial Developer is not the Participant) and all Contributors under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively and automatically at the expiration of such 60 day notice period, unless if within such 60 day period You withdraw Your claim with respect to the Participant Software against such Participant either unilaterally or pursuant to a written agreement with Participant.

6.3. In the event of termination under Sections 6.1 or 6.2 above, all end user licenses that have been validly granted by You or any distributor hereunder prior to termination (excluding licenses granted to You by any distributor) shall survive termination.

7. LIMITATION OF LIABILITY.

UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER TORT (INCLUDING NEGLIGENCE), CONTRACT, OR OTHERWISE, SHALL YOU, THE INITIAL DEVELOPER, ANY OTHER CONTRIBUTOR, OR ANY DISTRIBUTOR OF COVERED SOFTWARE, OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES, EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM SUCH PARTYS NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

8. U.S. GOVERNMENT END USERS.

The Covered Software is a commercial item, as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of commercial computer software (as that term is defined at 48 C.F.R. 252.227-7014(a)(1)) and commercial computer software documentation as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Software with only those rights set forth herein. This U.S. Government Rights clause is in lieu of, and supersedes, any other FAR, DFAR, or other clause or provision that addresses Government rights in computer software under this License.

9. MISCELLANEOUS.

This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by the law of the jurisdiction specified in a notice contained within the Original Software (except to the extent applicable law, if any, provides otherwise), excluding such jurisdictions conflict-of-law provisions. Any litigation relating to this License shall be subject to the jurisdiction of the courts located in the jurisdiction and venue specified in a notice contained within the Original Software, with the losing party responsible for costs, including, without limitation, court costs and reasonable attorneys fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License. You agree that You alone are responsible for compliance with the United States export administration regulations (and the export control laws and regulation of any other countries) when You use, distribute or otherwise make available any Covered Software.

10. RESPONSIBILITY FOR CLAIMS.

As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

M

BSD License and JSON License

If you have downloaded a copy of the RapidJSON source code from Tencent, please note that RapidJSON source code is licensed under the MIT License, except for the third-party components listed below which are subject to different license terms. Your integration of RapidJSON into your own projects may require compliance with the MIT License, as well as the other licenses applicable to the third-party components included within RapidJSON. To avoid the problematic JSON license in your own projects, it's sufficient to exclude the bin/jsonchecker/ directory, as it's the only code under the JSON license.

Other dependencies and licenses:

Open Source Software Licensed Under the BSD License:

The msinttypes r29 Copyright (c) 2006-2013 Alexander Chemeris

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of copyright holder nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE REGENTS AND CONTRIBUTORS ``AS IS'' AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS AND CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Open Source Software Licensed Under the JSON License:

---

json.org

Copyright (c) 2002 JSON.org

All Rights Reserved.

JSON_checker

Copyright (c) 2002 JSON.org

All Rights Reserved.

Terms of the JSON License:

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

The Software shall be used for Good, not Evil.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

N

JDOM 2.0.5 License

Copyright © 2000-2012 Jason Hunter & Brett McLaughlin.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions, and the following disclaimer.

2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions, and the disclaimer that follows these conditions in the documentation and/or other materials provided with the distribution.

3. The name "JDOM" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact <request_@_jdom_._org>.

4. Products derived from this software may not be called "JDOM", nor may "JDOM" appear in their name, without prior written permission from the JDOM Project Management <request_@_jdom_._org>.

In addition, we request (but do not require) that you include in the end-user documentation provided with the redistribution and/or in the software itself an acknowledgement equivalent to the following:

"This product includes software developed by the JDOM Project (http://www.jdom.org/)." Alternatively, the acknowledgment may be graphical using the logos available at http://www.jdom.org/images/logos.

THIS SOFTWARE IS PROVIDED ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES,

INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND

FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE JDOM

AUTHORS OR THE PROJECT CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT,

INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT

LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR

PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF

LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This software consists of voluntary contributions made by many individuals on behalf of the JDOM Project and was originally created by Jason Hunter <jhunter_@_jdom_._org> and Brett McLaughlin

<brett_@_jdom_._org>. For more information on the JDOM Project, please see <http://www.jdom.org/>.

O

Artistic License

(Required) Enter introductory text here, including the definition and purpose of the concept.

Licensed under the Artistic License (the "License"); you may not use this file except in compliance with this License.

The "Artistic License"

Preamble

The intent of this document is to state the conditions under which a Package may be copied, such that the Copyright Holder maintains some semblance of artistic control over the development of the package, while giving the users of the package the right to use and distribute the Package in a more-or-less customary fashion, plus the right to make reasonable modifications.

Definitions:

"Package" refers to the collection of files distributed by the Copyright Holder, and derivatives of that collection of files created through textual modification.

"Standard Version" refers to such a Package if it has not been modified, or has been modified in accordance with the wishes of the Copyright Holder as specified below.

"Copyright Holder" is whoever is named in the copyright or copyrights for the package.

"You" is you, if you're thinking about copying or distributing this Package.

"Reasonable copying fee" is whatever you can justify on the basis of media cost, duplication charges, time of people involved, and so on. (You will not be required to justify it to the Copyright Holder, but only to the computing community at large as a market that must bear the fee.)

"Freely Available" means that no fee is charged for the item itself, though there may be fees involved in handling the item. It also means that recipients of the item may redistribute it under the same conditions they received it.

You may make and give away verbatim copies of the source form of the Standard Version of this Package without restriction, provided that you duplicate all of the original copyright notices and associated disclaimers.

Third-Party Licenses

1. You may apply bug fixes, portability fixes and other modifications derived from the Public Domain or from the Copyright Holder. A Package modified in such a way shall still be considered the Standard Version.
2. You may otherwise modify your copy of this Package in any way, provided that you insert a prominent notice in each changed file stating how and when you changed that file, and provided that you do at least ONE of the following:

a. place your modifications in the Public Domain or otherwise make them Freely Available, such as by posting said modifications to Usenet or an equivalent medium, or placing the

modifications on a major archive site such as uunet.uu.net, or by allowing the Copyright Holder to include your modifications in the Standard Version of the Package.

b. use the modified Package only within your corporation or organization.

c. rename any non-standard executables so the names do not conflict with standard executables, which must also be provided, and provide a separate manual page for each non-standard executable that clearly documents how it differs from the Standard Version.

d. make other distribution arrangements with the Copyright Holder.

You may distribute the programs of this Package in object code or executable form, provided that you do at least ONE of the following:

a. distribute a Standard Version of the executables and library files, together with instructions (in the manual page or equivalent) on where to get the Standard Version.

b. accompany the distribution with the machine-readable source of the Package with your modifications.

c. give non-standard executables non-standard names, and clearly document the differences in manual pages (or equivalent), together with instructions on where to get the Standard Version.

d. make other distribution arrangements with the Copyright Holder.

1. You may charge a reasonable copying fee for any distribution of this Package. You may charge any fee you choose for support of this Package. You may not charge a fee for this Package itself. However, you may distribute this Package in aggregate with other (possibly commercial) programs as part of a larger (possibly commercial) software distribution provided that you do not advertise this Package as a product of your own. You may embed this Package's interpreter within an executable of yours (by linking); this shall be construed as a mere form of aggregation, provided that the complete Standard Version of the interpreter is so embedded.
2. The scripts and library files supplied as input to or produced as output from the programs of this Package do not automatically fall under the copyright of this Package, but belong to whoever generated them, and may be sold commercially, and may be aggregated with this Package. If such scripts or library files are aggregated with this Package via the so-called "undump" or "unexec" methods of producing a binary executable image, then distribution of such an image shall neither be construed as a distribution of this Package nor shall it fall under the restrictions of Paragraphs 3 and 4, provided that you do not represent such an executable image as a Standard Version of this Package.
3. C subroutines (or comparably compiled subroutines in other languages) supplied by you and linked into this Package in order to emulate subroutines and variables of the language defined by this Package shall not be considered part of this Package, but are the equivalent of input as in Paragraph 6, provided these subroutines do not change the language in any way that would cause it to fail the regression tests for the language.
4. Aggregation of this Package with a commercial distribution is always permitted provided that the use of this Package is embedded; that is, when no overt attempt is made to make this Package's interfaces visible to the end user of the commercial distribution. Such use shall not be construed as a distribution of this Package.

5. The name of the Copyright Holder may not be used to endorse or promote products derived from this software without specific prior written permission.
6. THIS PACKAGE IS PROVIDED "AS IS" AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE.

P

Artistic License 2.0

Copyright (c) 2000-2006, The Perl Foundation.

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

This license establishes the terms under which a given free software Package may be copied, modified, distributed, and/or redistributed. The intent is that the Copyright Holder maintains some artistic control over the development of that Package while still keeping the Package available as open source and free software.

You are always permitted to make arrangements wholly outside of this license directly with the Copyright Holder of a given Package. If the terms of this license do not permit the full use that you propose to make of the Package, you should contact the Copyright Holder and seek a different licensing arrangement.

Definitions

"Copyright Holder" means the individual(s) or organization(s) named in the copyright notice for the entire Package.

"Contributor" means any party that has contributed code or other material to the Package, in accordance with the Copyright Holder's procedures.

"You" and "your" means any person who would like to copy, distribute, or modify the Package.

"Package" means the collection of files distributed by the Copyright Holder, and derivatives of that collection and/or of those files. A given Package may consist of either the Standard Version, or a Modified Version.

"Distribute" means providing a copy of the Package or making it accessible to anyone else, or in the case of a company or organization, to others outside of your company or organization.

"Distributor Fee" means any fee that you charge for Distributing this Package or providing support for this Package to another party. It does not mean licensing fees.

"Standard Version" refers to the Package if it has not been modified, or has been modified only in ways explicitly requested by the Copyright Holder.

"Modified Version" means the Package, if it has been changed, and such changes were not explicitly requested by the Copyright Holder.

"Original License" means this Artistic License as Distributed with the Standard Version of the Package, in its current version or as it may be modified by The Perl Foundation in the future.

"Source" form means the source code, documentation source, and configuration files for the Package.

"Compiled" form means the compiled bytecode, object code, binary, or any other form resulting from mechanical transformation or translation of the Source form.

Permission for Use and Modification Without Distribution

(1) You are permitted to use the Standard Version and create and use Modified Versions for any purpose without restriction, provided that you do not Distribute the Modified Version.

Permissions for Redistribution of the Standard Version

(2) You may Distribute verbatim copies of the Source form of the Standard Version of this Package in any medium without restriction, either gratis or for a Distributor Fee, provided that you duplicate all of the original copyright notices and associated disclaimers. At your discretion, such verbatim copies may or may not include a Compiled form of the Package.

(3) You may apply any bug fixes, portability changes, and other modifications made available from the Copyright Holder. The resulting Package will still be considered the Standard Version, and as such will be subject to the Original License.

Distribution of Modified Versions of the Package as Source

(4) You may Distribute your Modified Version as Source (either gratis or for a Distributor Fee, and with or without a Compiled form of the Modified Version) provided that you clearly document how it differs from the Standard Version, including, but not limited to, documenting any non-standard features, executables, or modules, and provided that you do at least ONE of the following:

(a) make the Modified Version available to the Copyright Holder of the Standard Version, under the Original License, so that the Copyright Holder may include your modifications in the Standard Version.

(b) ensure that installation of your Modified Version does not prevent the user installing or running the Standard Version. In addition, the Modified Version must bear a name that is different from the name of the Standard Version.

(c) allow anyone who receives a copy of the Modified Version to make the Source form of the Modified Version available to others under

(i) the Original License or

(ii) a license that permits the licensee to freely copy, modify and redistribute the Modified Version using the same licensing terms that apply to the copy that the licensee received, and requires that the Source form of the Modified Version, and of any works derived from it, be made freely available in that license fees are prohibited but Distributor Fees are allowed.

Distribution of Compiled Forms of the Standard Version or Modified Versions without the Source

(5) You may Distribute Compiled forms of the Standard Version without the Source, provided that you include complete instructions on how to get the Source of the Standard Version. Such instructions must be valid at the time of your distribution. If these instructions, at any time while you are carrying out such distribution, become invalid, you must provide new instructions on demand or cease further distribution. If you provide valid instructions or cease distribution within thirty days after you become aware that the instructions are invalid, then you do not forfeit any of your rights under this license.

(6) You may Distribute a Modified Version in Compiled form without the Source, provided that you comply with Section 4 with respect to the Source of the Modified Version.

Aggregating or Linking the Package

(7) You may aggregate the Package (either the Standard Version or Modified Version) with other packages and Distribute the resulting aggregation provided that you do not charge a licensing fee for the Package. Distributor Fees are permitted, and licensing fees for other components in the aggregation are permitted. The terms of this license apply to the use and Distribution of the Standard or Modified Versions as included in the aggregation.

(8) You are permitted to link Modified and Standard Versions with other works, to embed the Package in a larger work of your own, or to build stand-alone binary or bytecode versions of applications that include the Package, and Distribute the result without restriction, provided the result does not expose a direct interface to the Package.

Items That are Not Considered Part of a Modified Version

(9) Works (including, but not limited to, modules and scripts) that merely extend or make use of the Package, do not, by themselves, cause the Package to be a Modified Version. In addition, such works are not considered parts of the Package itself, and are not subject to the terms of this license.

General Provisions

(10) Any use, modification, and distribution of the Standard or Modified Versions is governed by this Artistic License. By using, modifying or distributing the Package, you accept this license. Do not use, modify, or distribute the Package, if you do not accept this license.

(11) If your Modified Version has been derived from a Modified Version made by someone other than you, you are nevertheless required to ensure that your Modified Version complies with the requirements of this license.

(12) This license does not grant you the right to use any trademark, service mark, tradename, or logo of the Copyright Holder.

(13) This license includes the non-exclusive, worldwide, free-of-charge patent license to make, have made, use, offer to sell, sell, import and otherwise transfer the Package with respect to any patent claims licensable by the Copyright Holder that are necessarily infringed by the Package. If you institute patent litigation (including a cross-claim or counterclaim) against any party alleging that the Package constitutes direct or contributory patent infringement, then this Artistic License to you shall terminate on the date that such litigation is filed.

(14) Disclaimer of Warranty: THE PACKAGE IS PROVIDED BY THE COPYRIGHT HOLDER AND CONTRIBUTORS "AS IS' AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES. THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT ARE DISCLAIMED TO THE EXTENT PERMITTED BY YOUR LOCAL LAW. UNLESS REQUIRED BY LAW, NO COPYRIGHT HOLDER OR CONTRIBUTOR WILL BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING IN ANY WAY OUT OF THE USE OF THE PACKAGE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Q
The bzip2 License

(Required) Enter introductory text here, including the definition and purpose of the concept.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an acknowledgment in the product documentation would be appreciated but is not required.
3. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
4. The name of the author may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE AUTHOR ``AS IS AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

R

The Common Public License version 1.0

(Required) Enter introductory text here, including the definition and purpose of the concept.

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS COMMON PUBLIC

LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM

CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

DEFINITIONS

"Contribution" means:

a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and b) in the case of each subsequent

Contributor:

i) changes to the Program, and

ii) additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents " mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

GRANT OF RIGHTS

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.

b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents.

The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.

c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any.

For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

a) it complies with the terms and conditions of this Agreement; and

b) its license agreement:

i) effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;

ii) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;

iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and

iv) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange.

When the Program is made available in source code form:

a) it must be made available under this Agreement; and

b) a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright notices contained within the

Program.

Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the

commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such

Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial

Contributor must pay those damages.

NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN

"AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR

IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE,

NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each

Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY

CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL,

SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST

PROFITS), HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT,

STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY

OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS

GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against a Contributor with respect to a patent applicable to software (including a cross-claim or counterclaim in a lawsuit), then any patent licenses granted by that Contributor to such Recipient under this Agreement shall terminate as of the date such litigation is filed. In addition, if Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time.

No one other than the Agreement Steward has the right to modify this Agreement.

IBM is the initial Agreement Steward. IBM may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

S

Mozilla Public License (MPL), Version 2.0

Mozilla Public License, version 2.0

Definitions

1. Contributor

means each individual or legal entity that creates, contributes to the creation of, or owns Covered Software.

2. Contributor Version

means the combination of the Contributions of others (if any) used by a Contributor and that particular Contributor™s Contribution.

3. Contribution

means Covered Software of a particular Contributor.

4. Covered Software

means Source Code Form to which the initial Contributor has attached the notice in Exhibit A, the Executable Form of such Source Code Form, and Modifications of such Source Code Form, in each case including portions thereof.

5. Incompatible With Secondary Licenses

means

a. that the initial Contributor has attached the notice described in Exhibit B to the Covered Software; or

b. that the Covered Software was made available under the terms of version 1.1 or earlier of the License, but not also under the terms of a Secondary License.

6. Executable Form

means any form of the work other than Source Code Form.

7. Larger Work

means a work that combines Covered Software with other material, in a separate file or files, that is not Covered Software.

8. License

means this document.

9. Licensable

means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently, any and all of the rights conveyed by this License.

10. Modifications

means any of the following:

a. any file in Source Code Form that results from an addition to, deletion from, or modification of the contents of Covered Software; or

b. any new file in Source Code Form that contains any Covered Software.

11. Patent Claims of a Contributor

means any patent claim(s), including without limitation, method, process, and apparatus claims, in any patent Licensable by such Contributor that would be infringed, but for the grant of the License, by the making, using, selling, offering for sale, having made, import, or transfer of either its Contributions or its Contributor Version.

12. Secondary License

means either the GNU General Public License, Version 2.0, the GNU Lesser General Public License, Version 2.1, the GNU Affero General Public License, Version 3.0, or any later versions of those licenses.

13. Source Code Form

means the form of the work preferred for making modifications.

14. You (or Your)

means an individual or a legal entity exercising rights under this License. For legal entities, You includes any entity that controls, is controlled by, or is under common control with You. For purposes of this definition, control means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

License Grants and Conditions

1. Grants

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

a. under intellectual property rights (other than patent or trademark) Licensable by such Contributor to use, reproduce, make available, modify, display, perform, distribute, and otherwise exploit its Contributions, either on an unmodified basis, with Modifications, or as part of a Larger Work; and

b. under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.

2. Effective Date

The licenses granted in Section 2.1 with respect to any Contribution become effective for each Contribution on the date the Contributor first distributes such Contribution.

3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

a. for any code that a Contributor has removed from Covered Software; or

b. for infringements caused by: (i) Your and any other third party™s modifications of Covered Software, or (ii) the combination of its Contributions with other software (except as part of its Contributor Version); or

c. under Patent Claims infringed by Covered Software in the absence of its Contributions.

This License does not grant any rights in the trademarks, service marks, or logos of any Contributor (except as may be necessary to comply with the notice requirements in Section 3.4).

4. Subsequent Licenses

No Contributor makes additional grants as a result of Your choice to distribute the Covered Software under a subsequent version of this License (see Section 10.2) or under the terms of a Secondary License (if permitted under the terms of Section 3.3).

5. Representation

Each Contributor represents that the Contributor believes its Contributions are its original creation(s) or it has sufficient rights to grant the rights to its Contributions conveyed by this License.

6. Fair Use

This License is not intended to limit any rights You have under applicable copyright doctrines of fair use, fair dealing, or other equivalents.

7. Conditions

Sections 3.1, 3.2, 3.3, and 3.4 are conditions of the licenses granted in Section 2.1.

Responsibilities

1. Distribution of Source Form

All distribution of Covered Software in Source Code Form, including any Modifications that You create or to which You contribute, must be under the terms of this License. You must inform recipients that the Source Code Form of the Covered Software is governed by the terms of this License, and how they can obtain a copy of this License. You may not attempt to alter or restrict the recipients™ rights in the Source Code Form.

2. Distribution of Executable Form

If You distribute Covered Software in Executable Form then:

a. such Covered Software must also be made available in Source Code Form, as described in Section 3.1, and You must inform recipients of the Executable Form how they can obtain a copy of such Source Code Form by reasonable means in a timely manner, at a charge no more than the cost of distribution to the recipient; and

b. You may distribute such Executable Form under the terms of this License, or sublicense it under different terms, provided that the license for the Executable Form does not attempt to limit or alter the recipients™ rights in the Source Code Form under this License.

3. Distribution of a Larger Work

You may create and distribute a Larger Work under terms of Your choice, provided that You also comply with the requirements of this License for the Covered Software. If the Larger Work is a combination of Covered Software with a work governed by one or more Secondary Licenses, and the Covered Software is not Incompatible With Secondary Licenses, this License permits You to additionally distribute such Covered Software under the terms of such

Secondary License(s), so that the recipient of the Larger Work may, at their option, further distribute the Covered Software under the terms of either this License or such Secondary License(s).

4. Notices

You may not remove or alter the substance of any license notices (including copyright notices, patent notices, disclaimers of warranty, or limitations of liability) contained within the Source Code Form of the Covered Software, except that You may alter any license notices to the extent required to remedy known factual inaccuracies.

5. Application of Additional Terms

You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, You may do so only on Your own behalf, and not on behalf of any Contributor. You must make it absolutely clear that any such warranty, support, indemnity, or liability obligation is offered by You alone, and You hereby agree to indemnify every Contributor for any liability incurred by such Contributor as a result of warranty, support, indemnity or liability terms You offer. You may include additional disclaimers of warranty and limitations of liability specific to any jurisdiction.

Inability to Comply Due to Statute or Regulation

If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Covered Software due to statute, judicial order, or regulation then You must: (a) comply with the terms of this License to the maximum extent possible; and (b) describe the limitations and the code they affect. Such description must be placed in a text file included with all distributions of the Covered Software under this License. Except to the extent prohibited by statute or regulation, such description must be sufficiently detailed for a recipient of ordinary skill to be able to understand it.

Termination

1. The rights granted under this License will terminate automatically if You fail to comply with any of its terms. However, if You become compliant, then the rights granted under this License from a particular Contributor are reinstated (a) provisionally, unless and until such Contributor explicitly and finally terminates Your grants, and (b) on an ongoing basis, if such Contributor fails to notify You of the non-compliance by some reasonable means prior to 60 days after You have come back into compliance. Moreover, Your grants from a particular Contributor are reinstated on an ongoing basis if such Contributor notifies You of the non-compliance by some reasonable means, this is the first time You have received notice of non-compliance with this License from such Contributor, and You become compliant prior to 30 days after Your receipt of the notice.

2. If You initiate litigation against any entity by asserting a patent infringement claim (excluding declaratory judgment actions, counter-claims, and cross-claims) alleging that a Contributor Version directly or indirectly infringes any patent, then the rights granted to You by any and all Contributors for the Covered Software under Section 2.1 of this License shall terminate.

3. In the event of termination under Sections 5.1 or 5.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or Your distributors under this License prior to termination shall survive termination.Disclaimer of Warranty

Covered Software is provided under this License on an as is basis, without warranty of any kind, either expressed, implied, or statutory, including, without limitation,

warranties that the Covered Software is free of defects, merchantable, fit for a particular purpose or non-infringing. The entire risk as to the quality and performance of the Covered Software is with You. Should any Covered Software prove defective in any respect, You (not any Contributor) assume the cost of any necessary servicing, repair, or correction. This disclaimer of warranty constitutes an essential part of this License. No use of any Covered Software is authorized under this License except under this disclaimer.

Limitation of Liability

Under no circumstances and under no legal theory, whether tort (including negligence), contract, or otherwise, shall any Contributor, or anyone who distributes Covered Software as permitted above, be liable to You for any direct, indirect, special, incidental, or consequential damages of any character including, without limitation, damages for lost profits, loss of goodwill, work stoppage, computer failure or malfunction, or any and all other commercial damages or losses, even if such party shall have been informed of the possibility of such damages. This limitation of liability shall not apply to liability for death or personal injury resulting from such party™s negligence to the extent applicable law prohibits such limitation. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion and limitation may not apply to You.

Litigation

Any litigation relating to this License may be brought only in the courts of a jurisdiction where the defendant maintains its principal place of business and such litigation shall be governed by laws of that jurisdiction, without reference to its conflict-of-law provisions. Nothing in this Section shall prevent a party™s ability to bring cross-claims or counter-claims.

Miscellaneous

This License represents the complete agreement concerning the subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not be used to construe this License against a Contributor.

Versions of the License

1. New Versions

Mozilla Foundation is the license steward. Except as provided in Section 10.3, no one other than the license steward has the right to modify or publish new versions of this License. Each version will be given a distinguishing version number.

2. Effect of New Versions

You may distribute the Covered Software under the terms of the version of the License under which You originally received the Covered Software, or under the terms of any subsequent version published by the license steward.

3. Modified Versions

If you create software not governed by this License, and you want to create a new license for such software, you may create and use a modified version of this License if you rename the license and remove any references to the name of the license steward (except to note that such modified license differs from this License).

4. Distributing Source Code Form that is Incompatible With Secondary Licenses If You choose to distribute Source Code Form that is Incompatible With Secondary Licenses under the terms of this version of the License, the notice described in Exhibit B of this License must be attached.

Exhibit A - Source Code Form License Notice

This Source Code Form is subject to the terms of the Mozilla Public License, v.2.0. If a copy of the MPL was not distributed with this file, You can obtain one at http://mozilla.org/MPL/2.0/.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

Exhibit B - Incompatible With Secondary Licenses Notice

This Source Code Form is Incompatible with Secondary Licenses, as defined by the Mozilla Public License, v. 2.0.

T

GNU Lesser General Public License, Version 2.1 (LGPL-2.1)

GNU LESSER GENERAL PUBLIC LICENSE

Version 2.1, February 1999

Copyright (C) 1991, 1999 Free Software Foundation, Inc.

51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

Everyone is permitted to copy and distribute verbatim copies

of this license document, but changing it is not allowed.

[This is the first released version of the Lesser GPL. It also counts as the successor of the GNU Library Public License, version 2, hence the version number 2.1.]

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public Licenses are intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users.

This license, the Lesser General Public License, applies to some specially designated software packages--typically libraries--of the Free Software Foundation and other authors who decide to use it. You can use it too, but we suggest you first think carefully about whether this license or the ordinary General Public License is the better strategy to use in any particular case, based on the explanations below.

When we speak of free software, we are referring to freedom of use, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish); that you receive source code or can get it if you want it; that you can change the software and use pieces of it in new free programs; and that you are informed that you can do these things.

To protect your rights, we need to make restrictions that forbid distributors to deny you these rights or to ask you to surrender these rights. These restrictions translate to certain responsibilities for you if you distribute copies of the library or if you modify it.

For example, if you distribute copies of the library, whether gratis or for a fee, you must give the recipients all the rights that we gave you. You must make sure that they, too, receive or can get the source code. If you link other code with the library, you must provide complete object files to the recipients, so that they can relink them with the library after making changes to the library and recompiling it. And you must show them these terms so they know their rights.

We protect your rights with a two-step method: (1) we copyright the library, and (2) we offer you this license, which gives you legal permission to copy, distribute and/or modify the library.

To protect each distributor, we want to make it very clear that there is no warranty for the free library. Also, if the library is modified by someone else and passed on, the recipients should

know that what they have is not the original version, so that the original author's reputation will not be affected by problems that might be introduced by others.

Finally, software patents pose a constant threat to the existence of any free program. We wish to make sure that a company cannot effectively restrict the users of a free program by obtaining a restrictive license from a patent holder. Therefore, we insist that any patent license obtained for a version of the library must be consistent with the full freedom of use specified in this license.

Most GNU software, including some libraries, is covered by the ordinary GNU General Public License. This license, the GNU Lesser General Public License, applies to certain designated libraries, and is quite different from the ordinary General Public License. We use this license for certain libraries in order to permit linking those libraries into non-free programs.

When a program is linked with a library, whether statically or using a shared library, the combination of the two is legally speaking a combined work, a derivative of the original library. The ordinary General Public License therefore permits such linking only if the entire combination fits its criteria of freedom. The Lesser General Public License permits more lax criteria for linking other code with the library.

We call this license the "Lesser" General Public License because it does Less to protect the user's freedom than the ordinary General Public License. It also provides other free software developers Less of an advantage over competing non-free programs. These disadvantages are the reason we use the ordinary General Public License for many libraries. However, the Lesser license provides advantages in certain special circumstances.

For example, on rare occasions, there may be a special need to encourage the widest possible use of a certain library, so that it becomes a de-facto standard. To achieve this, non-free programs must be allowed to use the library. A more frequent case is that a free library does the same job as widely used non-free libraries. In this case, there is little to gain by limiting the free library to free software only, so we use the Lesser General Public License.

In other cases, permission to use a particular library in non-free programs enables a greater number of people to use a large body of free software. For example, permission to use the GNU C Library in non-free programs enables many more people to use the whole GNU operating system, as well as its variant, the GNU/Linux operating system.

Although the Lesser General Public License is Less protective of the users' freedom, it does ensure that the user of a program that is linked with the Library has the freedom and the wherewithal to run that program using a modified version of the Library.

The precise terms and conditions for copying, distribution and modification follow. Pay close attention to the difference between a "work based on the library" and a "work that uses the library". The former contains code derived from the library, whereas the latter must be combined with the library in order to run.

GNU LESSER GENERAL PUBLIC LICENSE

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of

this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

a) The modified work must itself be a software library.

b) You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.

c) You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.

d) If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections

when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

You may opt to apply the terms of the ordinary GNU General Public License instead of this License to a given copy of the Library. To do this, you must alter all the notices that refer to this License, so that they refer to the ordinary GNU General Public License, version 2, instead of to this License. (If a newer version than version 2 of the ordinary GNU General Public License has appeared, then you can specify that version instead if you wish.) Do not make any other change in these notices.

Once this change is made in a given copy, it is irreversible for that copy, so the ordinary GNU General Public License applies to all subsequent copies and derivative works made from that copy.

This option is useful when you wish to copy part of the code of the Library into a program that is not a library.

You may copy and distribute the Library (or a portion or derivative of it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange.

If distribution of object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place satisfies the requirement to distribute the source code, even though third parties are not compelled to copy the source along with the object code.

A program that contains no derivative of any portion of the Library, but is designed to work with the Library by being compiled or linked with it, is called a "work that uses the Library". Such a work, in isolation, is not a derivative work of the Library, and therefore falls outside the scope of this License.

However, linking a "work that uses the Library" with the Library creates an executable that is a derivative of the Library (because it contains portions of the Library), rather than a "work that uses the library". The executable is therefore covered by this License. Section 6 states terms for distribution of such executables.

When a "work that uses the Library" uses material from a header file that is part of the Library, the object code for the work may be a derivative work of the Library even though the source code is not. Whether this is true is especially significant if the work can be linked without the Library, or if the work is itself a library. The threshold for this to be true is not precisely defined by law.

If such an object file uses only numerical parameters, data structure layouts and accessors, and small macros and small inline functions (ten lines or less in length), then the use of the object file is unrestricted, regardless of whether it is legally a derivative work. (Executables containing this object code plus portions of the Library will still fall under Section 6.)

Otherwise, if the work is a derivative of the Library, you may distribute the object code for the work under the terms of Section 6. Any executables containing that work also fall under Section 6, whether or not they are linked directly with the Library itself.

As an exception to the Sections above, you may also combine or link a "work that uses the Library" with the Library to produce a work containing portions of the Library, and distribute that work under terms of your choice, provided that the terms permit modification of the work for the customer's own use and reverse engineering for debugging such modifications.

You must give prominent notice with each copy of the work that the Library is used in it and that the Library and its use are covered by this License. You must supply a copy of this License. If the work during execution displays copyright notices, you must include the copyright notice for the Library among them, as well as a reference directing the user to the copy of this License. Also, you must do one of these things:

a) Accompany the work with the complete corresponding machine-readable source code for the Library including whatever changes were used in the work (which must be distributed under Sections 1 and 2 above); and, if the work is an executable linked with the Library, with the complete machine-readable "work that uses the Library", as object code and/or source code, so that the user can modify the Library and then relink to produce a modified executable containing the modified Library. (It is understood that the user who changes the contents of definitions files in the Library will not necessarily be able to recompile the application to use the modified definitions.)

b) Use a suitable shared library mechanism for linking with the Library. A suitable mechanism is one that (1) uses at run time a copy of the library already present on the user's computer system, rather than copying library functions into the executable, and (2) will operate properly with a modified version of the library, if the user installs one, as long as the modified version is interface-compatible with the version that the work was made with.

c) Accompany the work with a written offer, valid for at least three years, to give the same user the materials specified in Subsection 6a, above, for a charge no more than the cost of performing this distribution.

d) If distribution of the work is made by offering access to copy from a designated place, offer equivalent access to copy the above specified materials from the same place.

e) Verify that the user has already received a copy of these materials or that you have already sent this user a copy.

For an executable, the required form of the "work that uses the Library" must include any data and utility programs needed for reproducing the executable from it. However, as a special exception, the materials to be distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

It may happen that this requirement contradicts the license restrictions of other proprietary libraries that do not normally accompany the operating system. Such a contradiction means you cannot use both them and the Library together in an executable that you distribute.

You may place library facilities that are a work based on the Library side-by-side in a single library together with other library facilities not covered by this License, and distribute such a combined library, provided that the separate distribution of the work based on the Library and of the other library facilities is otherwise permitted, and provided that you do these two things:

a) Accompany the combined library with a copy of the same work based on the Library, uncombined with any other library facilities. This must be distributed under the terms of the Sections above.

b) Give prominent notice with the combined library of the fact that part of it is a work based on the Library, and explaining where to find the accompanying uncombined form of the same work.

1. You may not copy, modify, sublicense, link with, or distribute the Library except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense, link with, or distribute the Library is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.
2. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or distribute the Library or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Library (or any work based on the Library), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Library or works based on it.
3. Each time you redistribute the Library (or any work based on the Library), the recipient automatically receives a license from the original licensor to copy, distribute, link with or modify the Library subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties with this License.
4. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Library at all. For example, if a patent license would not permit royalty-free redistribution of the Library by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Library.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply, and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system which is implemented by public license practices. Many people have made generous contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice.

This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

1. If the distribution and/or use of the Library is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Library under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or

among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

2. The Free Software Foundation may publish revised and/or new versions of the Lesser General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Library specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Library does not specify a license version number, you may choose any version ever published by the Free Software Foundation.

If you wish to incorporate parts of the Library into other free programs whose distribution conditions are incompatible with these, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

1. BECAUSE THE LIBRARY IS LICENSED FREE OF CHARGE, THERE IS NO WARRANTY FOR THE LIBRARY, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE LIBRARY "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.
2. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the library's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version.

This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details.

You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin St, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990

Ty Coon, President of Vice

U

Creative Commons Attribution License, Attribution 2.5

CREATIVE COMMONS CORPORATION IS NOT A LAW FIRM AND DOES NOT PROVIDE LEGAL SERVICES. DISTRIBUTION OF THIS LICENSE DOES NOT CREATE AN ATTORNEY-CLIENT RELATIONSHIP. CREATIVE COMMONS PROVIDES THIS INFORMATION ON AN "AS-IS" BASIS. CREATIVE COMMONS MAKES NO WARRANTIES REGARDING THE INFORMATION PROVIDED, AND DISCLAIMS LIABILITY FOR DAMAGES RESULTING FROM ITS USE.

License

THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CREATIVE COMMONS PUBLIC LICENSE ("CCPL" OR "LICENSE"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS LICENSE OR COPYRIGHT LAW IS PROHIBITED.

BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HERE, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. THE LICENSOR GRANTS YOU THE RIGHTS CONTAINED HERE IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

1. Definitions

"Collective Work" means a work, such as a periodical issue, anthology or encyclopedia, in which the Work in its entirety in unmodified form, along with a number of other contributions, constituting separate and independent works in themselves, are assembled into a collective whole. A work that constitutes a Collective Work will not be considered a Derivative Work (as defined below) for the purposes of this License.

"Derivative Work" means a work based upon the Work or upon the Work and other pre-existing works, such as a translation, musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which the Work may be recast, transformed, or adapted, except that a work that constitutes a Collective Work will not be considered a Derivative Work for the purpose of this License. For the avoidance of doubt, where the Work is a musical composition or sound recording, the synchronization of the Work in timed-relation with a moving image ("synching") will be considered a Derivative Work for the purpose of this License.

"Licensor" means the individual or entity that offers the Work under the terms of this License.

"Original Author" means the individual or entity who created the Work.

"Work" means the copyrightable work of authorship offered under the terms of this License.

"You" means an individual or entity exercising rights under this License who has not previously violated the terms of this License with respect to the Work, or who has received express permission from the Licensor to exercise rights under this License despite a previous violation.

2.Fair Use Rights. Nothing in this license is intended to reduce, limit, or restrict any rights arising from fair use, first sale or other limitations on the exclusive rights of the copyright owner under copyright law or other applicable laws.

3.License Grant. Subject to the terms and conditions of this License, Licensor hereby grants You a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) license to exercise the rights in the Work as stated below:

to reproduce the Work, to incorporate the Work into one or more Collective Works, and to reproduce the Work as incorporated in the Collective Works;

to create and reproduce Derivative Works;

to distribute copies or phonorecords of, display publicly, perform publicly, and perform publicly by means of a digital audio transmission the Work including as incorporated in Collective Works;

to distribute copies or phonorecords of, display publicly, perform publicly, and perform publicly by means of a digital audio transmission Derivative Works.

For the avoidance of doubt, where the work is a musical composition:

Performance Royalties Under Blanket Licenses. Licensor waives the exclusive right to collect, whether individually or via a performance rights society (e.g. ASCAP, BMI, SESAC), royalties for the public performance or public digital performance (e.g. webcast) of the Work.

Mechanical Rights and Statutory Royalties. Licensor waives the exclusive right to collect, whether individually or via a music rights agency or designated agent (e.g. Harry Fox Agency), royalties for any phonorecord You create from the Work ("cover version") and distribute, subject to the compulsory license created by 17 USC Section 115 of the US Copyright Act (or the equivalent in other jurisdictions).

Webcasting Rights and Statutory Royalties. For the avoidance of doubt, where the Work is a sound recording, Licensor waives the exclusive right to collect, whether individually or via a performance-rights society (e.g. SoundExchange), royalties for the public digital performance (e.g. webcast) of the Work, subject to the compulsory license created by 17 USC Section 114 of the US Copyright Act (or the equivalent in other jurisdictions).

The above rights may be exercised in all media and formats whether now known or hereafter devised. The above rights include the right to make such modifications as are technically necessary to exercise the rights in other media and formats. All rights not expressly granted by Licensor are hereby reserved.

4.Restrictions.The license granted in Section 3 above is expressly made subject to and limited by the following restrictions:

You may distribute, publicly display, publicly perform, or publicly digitally perform the Work only under the terms of this License, and You must include a copy of, or the Uniform Resource Identifier for, this License with every copy or phonorecord of the Work You distribute, publicly display, publicly perform, or publicly digitally perform. You may not offer or impose any terms on the Work that alter or restrict the terms of this License or the recipients' exercise of the rights granted hereunder. You may not sublicense the Work. You must keep intact all notices that refer to this License and to the disclaimer of warranties. You may not distribute, publicly display, publicly perform, or publicly digitally perform the Work with any technological measures that control access or use of the Work in a manner inconsistent with the terms of this License Agreement. The above applies to the Work as incorporated in a Collective Work, but

this does not require the Collective Work apart from the Work itself to be made subject to the terms of this License. If You create a Collective Work, upon notice from any Licensor You must, to the extent practicable, remove from the Collective Work any credit as required by clause 4(b), as requested. If You create a Derivative Work, upon notice from any Licensor You must, to the extent practicable, remove from the Derivative Work any credit as required by clause 4(b), as requested.

If you distribute, publicly display, publicly perform, or publicly digitally perform the Work or any Derivative Works or Collective Works, You must keep intact all copyright notices for the Work and provide, reasonable to the medium or means You are utilizing: (i) the name of the Original Author (or pseudonym, if applicable) if supplied, and/or (ii) if the Original Author and/or Licensor designate another party or parties (e.g. a sponsor institute, publishing entity, journal) for attribution in Licensor's copyright notice, terms of service or by other reasonable means, the name of such party or parties; the title of the Work if supplied; to the extent reasonably practicable, the Uniform Resource Identifier, if any, that Licensor specifies to be associated with the Work, unless such URI does not refer to the copyright notice or licensing information for the Work; and in the case of a Derivative Work, a credit identifying the use of the Work in the Derivative Work (e.g., "French translation of the Work by Original Author," or "Screenplay based on original Work by Original Author"). Such credit may be implemented in any reasonable manner; provided, however, that in the case of a Derivative Work or Collective Work, at a minimum such credit will appear where any other comparable authorship credit appears and in a manner at least as prominent as such other comparable authorship credit.

5.Representations, Warranties and Disclaimer

UNLESS OTHERWISE MUTUALLY AGREED TO BY THE PARTIES IN WRITING, LICENSOR OFFERS THE WORK AS-IS AND MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND CONCERNING THE WORK, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF TITLE, MERCHANTIBILITY, FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT, OR THE ABSENCE OF LATENT OR OTHER DEFECTS, ACCURACY, OR THE PRESENCE OF ABSENCE OF ERRORS, WHETHER OR NOT DISCOVERABLE. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO SUCH EXCLUSION MAY NOT APPLY TO YOU.

6.Limitation on Liability. EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL LICENSOR BE LIABLE TO YOU ON ANY LEGAL THEORY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES ARISING OUT OF THIS LICENSE OR THE USE OF THE WORK, EVEN IF LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7.Termination

This License and the rights granted hereunder will terminate automatically upon any breach by You of the terms of this License. Individuals or entities who have received Derivative Works or Collective Works from You under this License, however, will not have their licenses terminated provided such individuals or entities remain in full compliance with those licenses. Sections 1, 2, 5, 6, 7, and 8 will survive any termination of this License.

Subject to the above terms and conditions, the license granted here is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, Licensor reserves the right to release the Work under different license terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this License (or any other license that has been, or is required to be, granted under the terms of this License), and this License will continue in full force and effect unless terminated as stated above.

8.Miscellaneous

Each time You distribute or publicly digitally perform the Work or a Collective Work, the Licensor offers to the recipient a license to the Work on the same terms and conditions as the license granted to You under this License.

Each time You distribute or publicly digitally perform a Derivative Work, Licensor offers to the recipient a license to the original Work on the same terms and conditions as the license granted to You under this License.

If any provision of this License is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this License, and without further action by the parties to this agreement, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

No term or provision of this License shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party to be charged with such waiver or consent.

This License constitutes the entire agreement between the parties with respect to the Work licensed here. There are no understandings, agreements or representations with respect to the Work not specified here. Licensor shall not be bound by any additional provisions that may appear in any communication from You. This License may not be modified without the mutual written agreement of the Licensor and You.

Creative Commons is not a party to this License, and makes no warranty whatsoever in connection with the Work. Creative Commons will not be liable to You or any party on any legal theory for any damages whatsoever, including without limitation any general, special, incidental or consequential damages arising in connection to this license. Notwithstanding the foregoing two (2) sentences, if Creative Commons has expressly identified itself as the Licensor hereunder, it shall have all rights and obligations of Licensor.

Except for the limited purpose of indicating to the public that the Work is licensed under the CCPL, neither party will use the trademark "Creative Commons" or any related trademark or logo of Creative Commons without the prior written consent of Creative Commons. Any permitted use will be in compliance with Creative Commons' then-current trademark usage guidelines, as may be published on its website or otherwise made available upon request from time to time.

Creative Commons may be contacted at https://creativecommons.org/.

V

Node.js License

(Required) Enter introductory text here, including the definition and purpose of the concept.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

This license applies to parts of Node.js originating from the https://github.com/joyent/node repository:

Copyright Joyent, Inc. and other Node contributors. All rights reserved. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

The Node.js license applies to all parts of Node.js that are not externally maintained libraries. The externally maintained libraries used by Node.js are:

- Acorn, located at deps/acorn, is licensed as follows:

Copyright (C) 2012-2018 by various contributors (see AUTHORS)

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without

restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

- c-ares, located at deps/cares, is licensed as follows:

Copyright (c) 2007 - 2016, Daniel Stenberg with many contributors, see AUTHORS file. Copyright 1998 by the Massachusetts Institute of Technology.

Permission to use, copy, modify, and distribute this software and its documentation for any purpose and without fee is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear in supporting documentation, and that the name of M.I.T. not be used in advertising or publicity pertaining to distribution of the software without specific, written prior permission. M.I.T. makes no representations about the suitability of this software for any purpose. It is provided "as is" without express or implied warranty.

- HTTP Parser, located at deps/http_parser, is licensed as follows:

Copyright Joyent, Inc. and other Node contributors.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

- ICU, located at deps/icu-small, is licensed as follows:

COPYRIGHT AND PERMISSION NOTICE (ICU 58 and later)

Copyright © 1991-2018 Unicode, Inc. All rights reserved. Distributed under the Terms of Use in http://www.unicode.org/copyright.html.

Permission is hereby granted, free of charge, to any person obtaining a copy of the Unicode data files and any associated documentation (the "Data Files") or Unicode software and any associated documentation (the "Software") to deal in the Data Files or Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Data Files or Software, and to permit persons to whom the Data Files or Software are furnished to do so, provided that either (a) this copyright and permission notice appear with all copies of the Data Files or Software, or (b) this copyright and permission notice appear in associated Documentation.

THE DATA FILES AND SOFTWARE ARE PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THE DATA FILES OR SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in these Data Files or Software without prior written authorization of the copyright holder.

Third-Party Software Licenses

This section contains third-party software notices and/or additional terms for licensed third-party software components included within ICU libraries.

1. ICU License - ICU 1.8.1 to ICU 57.1 COPYRIGHT AND PERMISSION NOTICE

Copyright (c) 1995-2016 International Business Machines Corporation and others All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, provided that the above copyright notice(s) and this permission notice appear in all copies of the Software and that both the above copyright notice(s) and this permission notice appear in supporting documentation.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR HOLDERS INCLUDED IN THIS NOTICE BE LIABLE FOR ANY CLAIM, OR ANY SPECIAL INDIRECT OR CONSEQUENTIAL DAMAGES, OR ANY DAMAGES WHATSOEVER RESULTING FROM LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR PERFORMANCE OF THIS SOFTWARE.

Except as contained in this notice, the name of a copyright holder shall not be used in advertising or otherwise to promote the sale, use or other dealings in this Software without prior written authorization of the copyright holder.

All trademarks and registered trademarks mentioned herein are the property of their respective owners.

Chinese/Japanese Word Break Dictionary Data (cjdict.txt)

The Google Chrome software developed by Google is licensed under the BSD license. Other software included in this distribution is provided under other licenses, as set forth below.

The BSD License http://opensource.org/licenses/bsd-license.php Copyright (C) 2006-2008, Google Inc.

All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution. Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN

ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The word list in cjdict.txt are generated by combining three word lists listed below with further processing for compound word breaking. The frequency is generated with an iterative training against Google web corpora.

* Libtabe (Chinese)

- https://sourceforge.net/project/?group_id=1519

- Its license terms and conditions are shown below.

* IPADIC (Japanese)

- http://chasen.aist-nara.ac.jp/chasen/distribution.html - Its license terms and conditions are shown below.

- --------COPYING.libtabe ---- BEGIN---------- /*

* Copyright (c) 1999 TaBE Project.

* Copyright (c) 1999 Pai-Hsiang Hsiao.

* All rights reserved.

*

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met:

*

* . Redistributions of source code must retain the above copyright

* notice, this list of conditions and the following disclaimer.

* . Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in

* the documentation and/or other materials provided with the

* distribution.

* . Neither the name of the TaBE Project nor the names of its

* contributors may be used to endorse or promote products derived

* from this software without specific prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION)

* HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

/*

* Copyright (c) 1999 Computer Systems and Communication Lab,

* Institute of Information Science, Academia

* Sinica. All rights reserved. *

* Redistribution and use in source and binary forms, with or without

* modification, are permitted provided that the following conditions

* are met: *

* . Redistributions of source code must retain the above copyright

* notice, this list of conditions and the following disclaimer.

* . Redistributions in binary form must reproduce the above copyright

* notice, this list of conditions and the following disclaimer in

* the documentation and/or other materials provided with the

* distribution.

* . Neither the name of the Computer Systems and Communication Lab

* nor the names of its contributors may be used to endorse or

* promote products derived from this software without specific

* prior written permission.

*

* THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE REGENTS OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Copyright 1996 Chih-Hao Tsai @ Beckman Institute, University of Illinois

c-tsai4@uiuc.edu http://casper.beckman.uiuc.edu/~c-tsai4

- ----------COPYING.libtabe-----END----------

- ----------COPYING.ipadic-----BEGIN----------

Copyright 2000, 2001, 2002, 2003 Nara Institute of Science and Technology. All Rights Reserved.

Use, reproduction, and distribution of this software is permitted. Any copy of this software, whether in its original form or modified, must include both the above copyright notice and the following paragraphs.

Nara Institute of Science and Technology (NAIST),

the copyright holders, disclaims all warranties with regard to this software, including all implied warranties of merchantability and fitness, in no event shall NAIST be liable for any special, indirect or consequential damages or any damages whatsoever resulting from loss of use, data or profits, whether in an action of contract, negligence or other tortuous action, arising out of or in connection with the use or performance of this software.

A large portion of the dictionary entries

originate from ICOT Free Software. The following conditions for ICOT Free Software applies to the current dictionary as well.

Each User may also freely distribute the Program, whether in its original form or modified, to any third party or parties, PROVIDED that the provisions of Section 3 ("NO WARRANTY") will ALWAYS appear on, or be attached to, the Program, which is distributed substantially in the same form as set out herein and that such intended

distribution, if actually made, will neither violate or otherwise contravene any of the laws and regulations of the countries having jurisdiction over the User or the intended distribution itself.

NO WARRANTY

The program was produced on an experimental basis in the course of the research and development conducted during the project and is provided to users as so produced on an experimental basis. Accordingly, the program is provided without any warranty whatsoever, whether express, implied, statutory or otherwise. The term "warranty" used herein includes, but is not limited to, any warranty of the quality, performance, merchantability and fitness for a particular purpose of the program and the nonexistence of any infringement or violation of any right of any third party.

Each user of the program will agree and understand, and be deemed to have agreed and understood, that there is no warranty whatsoever for the program and, accordingly, the entire risk arising from or otherwise connected with the program is assumed by the user.

Therefore, neither ICOT, the copyright holder, or any other organization that participated in or was otherwise related to the development of the program and their respective officials, directors, officers and other employees shall be held liable for any and all damages, including, without limitation, general, special, incidental and consequential damages, arising out of or otherwise in connection with the use or inability to use the program or any product, material or result produced or otherwise obtained by using the program, regardless of whether they have been advised of, or otherwise had knowledge of, the possibility of such damages at any time during the project or thereafter. Each user will be deemed to have agreed to the foregoing by his or her commencement of use of the program. The term "use" as used herein includes, but is not limited to, the use, modification, copying and distribution of the program and the production of secondary products from the program.

In the case where the program, whether in its original form or modified, was distributed or delivered to or received by a user from any person, organization or entity other than ICOT, unless it makes or grants independently of ICOT any specific warranty to the user in writing, such person, organization or entity, will also be exempted from and not be held liable to the user for any such damages as noted above as far as the program is concerned.

- ----------COPYING.ipadic-----END----------

Lao Word Break Dictionary Data (laodict.txt)

Copyright (c) 2013 International Business Machines Corporation and others. All Rights Reserved.

Project: http://code.google.com/p/lao-dictionary/ Dictionary: http://lao-dictionary.googlecode.com/git/Lao-Dictionary.txt License: http://lao-dictionary.googlecode.com/git/Lao-Dictionary-LICENSE.txt (copied below)

This file is derived from the above dictionary, with slight modifications.

Copyright (C) 2013 Brian Eugene Wilson, Robert Martin Campbell. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED

TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Burmese Word Break Dictionary Data (burmesedict.txt)

Copyright (c) 2014 International Business Machines Corporation and others. All Rights Reserved.

This list is part of a project hosted at: github.com/kanyawtech/myanmar-karen-word-lists

Copyright (c) 2013, LeRoy Benjamin Sharon All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met: Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name Myanmar Karen Word Lists, nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT HOLDER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Time Zone Database

ICU uses the public domain data and code derived from Time Zone Database for its time zone support. The ownership of the TZ database is explained in BCP 175: Procedure for Maintaining the Time Zone Database section 7.

Database Ownership

The TZ database itself is not an IETF Contribution or an IETF document. Rather it is a pre-existing and regularly updated work that is in the public domain, and is intended to remain in the public domain. Therefore, BCPs 78 [RFC5378] and 79 [RFC3979] do not apply to the TZ Database or contributions that individuals make to it. Should any claims be made and substantiated against the TZ Database, the organization that is

providing the IANA Considerations defined in this RFC, under the memorandum of understanding with the IETF, currently ICANN, may act in accordance with all competent court orders. No ownership claims will be made by ICANN or the IETF Trust on the database or the code. Any person making a contribution to the database or code waives all rights to future claims in that contribution or in the TZ Database.

Google double-conversion

Copyright 2006-2011, the V8 project authors. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- libuv, located at deps/uv, is licensed as follows:

libuv is licensed for use as follows:

Copyright (c) 2015-present libuv project contributors.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

This license applies to parts of libuv originating from the https://github.com/joyent/libuv repository:

Copyright Joyent, Inc. and other Node contributors. All rights reserved. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

This license applies to all parts of libuv that are not externally maintained libraries. The externally maintained libraries used by libuv are:

- tree.h (from FreeBSD), copyright Niels Provos. Two clause BSD license.

- inet_pton and inet_ntop implementations, contained in src/inet.c, are copyright the Internet Systems Consortium, Inc., and licensed under the ISC license.

- stdint-msvc2008.h (from msinttypes), copyright Alexander Chemeris. Three clause BSD license.

- pthread-fixes.c, copyright Google Inc. and Sony Mobile Communications AB. Three clause BSD license.

- android-ifaddrs.h, android-ifaddrs.c, copyright Berkeley Software Design Inc, Kenneth MacKay and Emergya (Cloud4all, FP7/2007-2013, grant agreement n° 289016). Three clause BSD license.

- OpenSSL, located at deps/openssl, is licensed as follows:

Copyright (c) 1998-2018 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (http://www.openssl.org/)"
4. The names "OpenSSL Toolkit" and "OpenSSL Project" must not be used to endorse or promote products derived from this software without prior written permission. For

written permission, please contact openssl-core@openssl.org.

1. Products derived from this software may not be called "OpenSSL" nor may "OpenSSL" appear in their names without prior written permission of the OpenSSL Project.
2. Redistributions of any form whatsoever must retain the following acknowledgment: "This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)"

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

- Punycode.js, located at lib/punycode.js, is licensed as follows:

Copyright Mathias Bynens <https://mathiasbynens.be/>

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

- V8, located at deps/v8, is licensed as follows:

This license applies to all parts of V8 that are not externally maintained libraries. The externally maintained libraries used by V8 are:

- PCRE test suite, located in test/mjsunit/third_party/regexp-pcre/regexp-pcre.js. This is based on the test suite from PCRE-7.3, which is copyrighted by the University of Cambridge and Google, Inc. The copyright notice and license are embedded in regexp-pcre.js.

- Layout tests, located in test/mjsunit/third_party/object-keys. These are based on layout tests from webkit.org which are copyrighted by Apple Computer, Inc. and released under a 3-clause BSD license.

- Strongtalk assembler, the basis of the files assembler-arm-inl.h, assembler-arm.cc, assembler-arm.h, assembler- ia32-inl.h, assembler-ia32.cc, assembler-ia32.h, assembler-x64-inl.h, assembler-x64.cc, assembler-x64.h, assembler- mips-inl.h, assembler-mips.cc, assembler-mips.h, assembler.cc and assembler.h. This code is copyrighted by Sun Microsystems Inc. and released under a 3-clause BSD license.

- Valgrind client API header, located at third_party/valgrind/valgrind.h This is release under the BSD license.

- antlr4 parser generator Cpp library located in third_party/antlr4 This is release under the BSD license.

These libraries have their own licenses; we recommend you read them, as their terms may differ from the terms below. Further license information can be found in LICENSE files located in sub-directories.

Copyright 2014, the V8 project authors. All rights reserved. Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- zlib, located at deps/zlib, is licensed as follows:

zlib.h -- interface of the 'zlib' general purpose compression library version 1.2.11, January 15th, 2017 Copyright (C) 1995-2017 Jean-loup Gailly and Mark Adler

This software is provided 'as-is', without any express or implied warranty. In no event will the authors be held liable for any damages arising from the use of this software.

Permission is granted to anyone to use this software for any purpose, including commercial applications, and to alter it and redistribute it freely, subject to the following restrictions:

1. The origin of this software must not be misrepresented; you must not claim that you wrote the original software. If you use this software in a product, an

acknowledgment in the product documentation would be appreciated but is not required.

2. Altered source versions must be plainly marked as such, and must not be misrepresented as being the original software.
3. This notice may not be removed or altered from any source distribution.

Jean-loup Gailly Mark Adler

jloup@gzip.org madler@alumni.caltech.edu

- npm, located at deps/npm, is licensed as follows:

The npm application

Copyright (c) npm, Inc. and Contributors Licensed on the terms of The Artistic License 2.0

Node package dependencies of the npm application Copyright (c) their respective copyright owners Licensed on their respective license terms

The npm public registry at https://registry.npmjs.org and the npm website at https://www.npmjs.com Operated by npm, Inc. Use governed by terms published on https://www.npmjs.com

"Node.js"

Trademark Joyent, Inc., https://joyent.com

Neither npm nor npm, Inc. are affiliated with Joyent, Inc.

The Node.js application

Project of Node Foundation, https://nodejs.org

The npm Logo

Copyright (c) Mathias Pettersson and Brian Hammond

"Gubblebum Blocky" typeface

Copyright (c) Tjarda Koster, https://jelloween.deviantart.com Used with permission

The Artistic License 2.0

Copyright (c) 2000-2006, The Perl Foundation.

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed. Preamble

This license establishes the terms under which a given free software Package may be copied, modified, distributed, and/ or redistributed. The intent is that the Copyright Holder maintains some artistic control over the development of that Package while still keeping the Package available as open source and free software.

You are always permitted to make arrangements wholly outside of this license directly with the Copyright Holder of a given Package. If the terms of this license do not permit the full use that you propose to make of the Package, you should contact the Copyright Holder and seek a different licensing arrangement.

Definitions

"Copyright Holder" means the individual(s) or organization(s) named in the copyright notice for the entire Package.

"Contributor" means any party that has contributed code or other material to the Package, in accordance with the Copyright Holder's procedures.

"You" and "your" means any person who would like to copy, distribute, or modify the Package.

"Package" means the collection of files distributed by the Copyright Holder, and derivatives of that collection and/or of those files. A given Package may consist of either the Standard Version, or a Modified Version.

"Distribute" means providing a copy of the Package or making it accessible to anyone else, or in the case of a company or organization, to others outside of your company or organization.

"Distributor Fee" means any fee that you charge for Distributing this Package or providing support for this Package to another party. It does not mean licensing fees.

"Standard Version" refers to the Package if it has not been modified, or has been modified only in ways explicitly requested by the Copyright Holder.

"Modified Version" means the Package, if it has been changed, and such changes were not explicitly requested by the Copyright Holder.

"Original License" means this Artistic License as Distributed with the Standard Version of the Package, in its current version or as it may be modified by The Perl Foundation in the future.

"Source" form means the source code, documentation source, and configuration files for the Package.

"Compiled" form means the compiled bytecode, object code, binary, or any other form resulting from mechanical transformation or translation of the Source form.

Permission for Use and Modification Without Distribution

(1) You are permitted to use the Standard Version and create and use Modified Versions for any purpose without restriction, provided that you do not Distribute the Modified Version.

Permissions for Redistribution of the Standard Version

(2) You may Distribute verbatim copies of the Source form of the Standard Version of this Package in any medium without restriction, either gratis or for a Distributor Fee, provided that you duplicate all of the original copyright notices and associated disclaimers. At your discretion, such verbatim copies may or may not include a Compiled form of the Package.

(3) You may apply any bug fixes, portability changes, and other modifications made available from the Copyright Holder. The resulting Package will still be considered the Standard Version, and as such will be subject to the Original License.

Distribution of Modified Versions of the Package as Source

(4) You may Distribute your Modified Version as Source (either gratis or for a Distributor Fee, and with or without a Compiled form of the Modified Version) provided that you clearly document how it differs from the Standard Version, including, but not limited to, documenting any non-standard features, executables, or modules, and provided that you do at least ONE of the following:

(a) make the Modified Version available to the Copyright Holder of the Standard Version, under the Original License, so that the Copyright Holder may include your modifications in the Standard Version.

(b) ensure that installation of your Modified Version does not prevent the user installing or running the Standard Version. In addition, the Modified Version must bear a name that is different from the name of the Standard Version.

(c) allow anyone who receives a copy of the Modified Version to make the Source form of the Modified Version

available to others under

(i) the Original License or

(ii) a license that permits the licensee to freely copy, modify and redistribute the Modified Version using the same licensing terms that apply to the copy that the licensee received, and requires that the Source form of the Modified Version, and of any works derived from it, be made freely available in that license fees are prohibited but Distributor Fees are allowed.

Distribution of Compiled Forms of the Standard Version or Modified Versions without the Source

(5) You may Distribute Compiled forms of the Standard Version without the Source, provided that you include complete instructions on how to get the Source of the Standard Version. Such instructions must be valid at the time of your distribution. If these instructions, at any time while you are carrying out such distribution, become invalid, you must provide new instructions on demand or cease further distribution. If you provide valid instructions or cease distribution within thirty days after you become aware that the instructions are invalid, then you do not forfeit any of your rights under this license.

(6) You may Distribute a Modified Version in Compiled form without the Source, provided that you comply with Section 4 with respect to the Source of the Modified Version.

Aggregating or Linking the Package

(7) You may aggregate the Package (either the Standard Version or Modified Version) with other packages and Distribute the resulting aggregation provided that you do not charge a licensing fee for the Package. Distributor Fees are permitted, and licensing fees for other components in the aggregation are permitted. The terms of this license apply to the use and Distribution of the Standard or Modified Versions as included in the aggregation.

(8) You are permitted to link Modified and Standard Versions with other works, to embed the Package in a larger work of your own, or to build stand-alone binary or bytecode versions of applications that include the Package, and Distribute the result without restriction, provided the result does not expose a direct interface to the Package.

Items That are Not Considered Part of a Modified Version

(9) Works (including, but not limited to, modules and scripts) that merely extend or make use of the Package, do not, by themselves, cause the Package to be a Modified Version. In addition, such works are not considered parts of the Package itself, and are not subject to the terms of this license.

General Provisions

(10) Any use, modification, and distribution of the Standard or Modified Versions is governed by this Artistic License. By using, modifying or distributing the Package, you accept this license. Do not use, modify, or distribute the Package, if you do not accept this license.

(11) If your Modified Version has been derived from a Modified Version made by someone other than you, you are nevertheless required to ensure that your Modified Version complies with the requirements of this license.

(12) This license does not grant you the right to use any trademark, service mark, tradename, or logo of the Copyright Holder.

(13) This license includes the non-exclusive, worldwide, free-of-charge patent license to make, have made, use, offer to sell, sell, import and otherwise transfer the Package with respect to any patent claims licensable by the Copyright Holder that are necessarily infringed by the Package. If you institute patent litigation (including a cross-claim or counterclaim) against any party alleging that the Package constitutes direct or contributory patent infringement, then this Artistic License to you shall terminate on the date that such litigation is filed.

(14) Disclaimer of Warranty:

THE PACKAGE IS PROVIDED BY THE COPYRIGHT HOLDER AND CONTRIBUTORS "AS IS' AND WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES. THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT ARE DISCLAIMED TO THE EXTENT PERMITTED BY YOUR LOCAL LAW. UNLESS REQUIRED BY LAW, NO COPYRIGHT HOLDER OR CONTRIBUTOR WILL BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING IN ANY WAY OUT OF THE USE OF THE PACKAGE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- GYP, located at tools/gyp, is licensed as follows:

Copyright (c) 2009 Google Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- inspector_protocol, located at tools/inspector_protocol, is licensed as follows:

// Copyright 2016 The Chromium Authors. All rights reserved. // // Redistribution and use in source and binary forms, with or without // modification, are permitted provided that the following conditions are // met: // // * Redistributions of source code must retain the above copyright // notice, this list of conditions and the following disclaimer. // * Redistributions in binary form must reproduce the above // copyright notice, this list of conditions and the following disclaimer // in the documentation and/or other materials provided with the // distribution. // * Neither the name of Google Inc. nor the names of its // contributors may be used to endorse or promote products derived from // this software without specific prior written permission. // // THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS // "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT // LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR // A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT // OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, // SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT // LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, // DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY // THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT // (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE // OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- jinja2, located at tools/jinja2, is licensed as follows:

Copyright (c) 2009 by the Jinja Team, see AUTHORS for more details. Some rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* The names of the contributors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- markupsafe, located at tools/markupsafe, is licensed as follows:

Copyright (c) 2010 by Armin Ronacher and contributors. See AUTHORS for more details. Some rights reserved.

Redistribution and use in source and binary forms of the software as well as documentation, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* The names of the contributors may not be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE AND DOCUMENTATION IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE AND DOCUMENTATION, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- cpplint.py, located at tools/cpplint.py, is licensed as follows:

Copyright (c) 2009 Google Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- ESLint, located at tools/node_modules/eslint, is licensed as follows:

Copyright JS Foundation and other contributors, https://js.foundation

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

- babel-eslint, located at tools/node_modules/babel-eslint, is licensed as follows:

Copyright (c) 2014-2016 Sebastian McKenzie <sebmck@gmail.com> MIT License

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

- gtest, located at deps/gtest, is licensed as follows:

Copyright 2008, Google Inc. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

* Neither the name of Google Inc. nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A

PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

- nghttp2, located at deps/nghttp2, is licensed as follows:

The MIT License

Copyright (c) 2012, 2014, 2015, 2016 Tatsuhiro Tsujikawa Copyright (c) 2012, 2014, 2015, 2016 nghttp2 contributors

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

- node-inspect, located at deps/node-inspect, is licensed as follows:

Copyright Node.js contributors. All rights reserved.

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the

Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING

FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

W

GNU General Public License v3 (GPL v3)

GNU GENERAL PUBLIC LICENSE

Version 3, 29 June 2007

Copyright (C) 2007 Free Software Foundation, Inc. <http://fsf.org/>

Everyone is permitted to copy and distribute verbatim copies

of this license document, but changing it is not allowed.

Preamble

The GNU General Public License is a free, copyleft license for software and other kinds of works.

The licenses for most software and other practical works are designed to take away your freedom to share and change the works. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change all versions of a program--to make sure it remains free software for all its users. We, the Free Software Foundation, use the GNU General Public License for most of our software; it applies also to any other work released this way by its authors. You can apply it to your programs, too. When we speak of free software, we are referring to freedom, not price. Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for them if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs, and that you know you can do these things.

To protect your rights, we need to prevent others from denying you these rights or asking you to surrender the rights. Therefore, you have certain responsibilities if you distribute copies of the software, or if you modify it: responsibilities to respect the freedom of others.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must pass on to the recipients the same freedoms that you received. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.

Developers that use the GNU GPL protect your rights with two steps:

(1) assert copyright on the software, and

(2) offer you this License giving you legal permission to copy, distribute and/or modify it.

For the developers' and authors' protection, the GPL clearly explains that there is no warranty for this free software. For both users' and authors' sake, the GPL requires that modified versions be marked as changed, so that their problems will not be attributed erroneously to authors of previous versions.

Some devices are designed to deny users access to install or run modified versions of the software inside them, although the manufacturer can do so. This is fundamentally incompatible with the aim of protecting users' freedom to change the software. The systematic pattern of such abuse occurs in the area of products for individuals to use, which is precisely where it is most unacceptable. Therefore, we have designed this version of the

GPL to prohibit the practice for those products. If such problems arise substantially in other domains, we stand ready to extend this provision to those domains in future versions of the GPL, as needed to protect the freedom of users.

Finally, every program is threatened constantly by software patents. States should not allow patents to restrict development and use of software on general-purpose computers, but in those that do, we wish to avoid the special danger that patents applied to a free program could make it effectively proprietary. To prevent this, the GPL assures that patents cannot be used to render the program non-free.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS

Definitions.

"This License" refers to version 3 of the GNU General Public License.

"Copyright" also means copyright-like laws that apply to other kinds of works, such as semiconductor masks.

"The Program" refers to any copyrightable work licensed under this License. Each licensee is addressed as "you". "Licensees" and "recipients" may be individuals or organizations. To "modify" a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a "modified version" of the earlier work or a work "based on" the earlier work. A "covered work" means either the unmodified Program or a work based on the Program. To "propagate" a work means to do anything with it that, without permission, would make you directly or secondarily liable for infringement under applicable copyright law, except executing it on a computer or modifying a private copy. Propagation includes copying, distribution (with or without modification), making available to the public, and in some countries other activities as well. To "convey" a work means any kind of propagation that enables other parties to make or receive copies. Mere interaction with a user through a computer network, with no transfer of a copy, is not conveying. An interactive user interface displays "Appropriate Legal Notices" to the extent that it includes a convenient and prominently visible feature that (1) displays an appropriate copyright notice, and (2) tells the user that there is no warranty for the work (except to the extent that warranties are provided), that licensees may convey the work under this License, and how to view a copy of this License. If the interface presents a list of user commands or options, such as a menu, a prominent item in the list meets this criterion.

Source Code.

The "source code" for a work means the preferred form of the work for making modifications to it. "Object code" means any non-source form of a work. A "Standard Interface" means an interface that either is an official standard defined by a recognized standards body, or, in the case of interfaces specified for a particular programming language, one that is widely used among developers working in that language. The "System Libraries" of an executable work include anything, other than the work as a whole, that (a) is included in the normal form of packaging a Major Component, but which is not part of that Major Component, and (b) serves only to enable use of the work with that Major Component, or to implement a Standard Interface for which an implementation is available to the public in source code form. A "Major Component", in this context, means a major essential component (kernel, window system, and so on) of the specific operating system (if any) on which the executable work runs, or a compiler used to produce the work, or an object code interpreter used to run it. The "Corresponding Source" for a work in object code form means all the source code

needed to generate, install, and (for an executable work) run the object code and to modify the work, including scripts to control those activities. However, it does not include the work's System Libraries, or general-purpose tools or generally available free programs which are used unmodified in performing those activities but which are not part of the work. For example, Corresponding Source includes interface definition files associated with source files for the work, and the source code for shared libraries and dynamically linked subprograms that the work is specifically designed to require, such as by intimate data communication or control flow between those subprograms and other parts of the work.

The Corresponding Source need not include anything that users can regenerate automatically from other parts of the Corresponding Source.

The Corresponding Source for a work in source code form is that same work.

Basic Permissions.

All rights granted under this License are granted for the term of copyright on the Program, and are irrevocable provided the stated conditions are met. This License explicitly affirms your unlimited permission to run the unmodified Program. The output from running a covered work is covered by this License only if the output, given its content, constitutes a covered work. This License acknowledges your rights of fair use or other equivalent, as provided by copyright law. You may make, run and propagate covered works that you do not convey, without conditions so long as your license otherwise remains in force. You may convey covered works to others for the sole purpose of having them make modifications exclusively for you, or provide you with facilities for running those works, provided that you comply with the terms of this License in conveying all material for which you do not control copyright. Those thus making or running the covered works for you must do so exclusively on your behalf, under your direction and control, on terms that prohibit them from making any copies of your copyrighted material outside their relationship with you. Conveying under any other circumstances is permitted solely under the conditions stated below. Sublicensing is not allowed; section 10 makes it unnecessary.

Protecting Users' Legal Rights From Anti-Circumvention Law.

No covered work shall be deemed part of an effective technological measure under any applicable law fulfilling obligations under article 11 of the WIPO copyright treaty adopted on 20 December 1996, or similar laws prohibiting or restricting circumvention of such measures. When you convey a covered work, you waive any legal power to forbid circumvention of technological measures to the extent such circumvention is effected by exercising rights under this License with respect to the covered work, and you disclaim any intention to limit operation or modification of the work as a means of enforcing, against the work's users, your or third parties' legal rights to forbid circumvention of technological measures.

Conveying Verbatim Copies.

You may convey verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice; keep intact all notices stating that this License and any non-permissive terms added in accord with section 7 apply to the code; keep intact all notices of the absence of any warranty; and give all recipients a copy of this License along with the Program. You may charge any price or no price for each copy that you convey, and you may offer support or warranty protection for a fee. Conveying Modified Source Versions. You may convey a work based on the Program, or the modifications to produce it from the Program, in the form of source code under the terms of section 4, provided that you also meet all of these conditions:

a) The work must carry prominent notices stating that you modified it, and giving a relevant date.

b) The work must carry prominent notices stating that it is released under this License and any conditions added under section

This requirement modifies the requirement in section 4 to "keep intact all notices".

c) You must license the entire work, as a whole, under this License to anyone who comes into possession of a copy. This License will therefore apply, along with any applicable section 7 additional terms, to the whole of the work, and all its parts, regardless of how they are packaged. This License gives no permission to license the work in any other way, but it does not invalidate such permission if you have separately received it.

d) If the work has interactive user interfaces, each must display Appropriate Legal Notices; however, if the Program has interactive interfaces that do not display Appropriate Legal Notices, your work need not make them do so.

A compilation of a covered work with other separate and independent works, which are not by their nature extensions of the covered work, and which are not combined with it such as to form a larger program, in or on a volume of a storage or distribution medium, is called an "aggregate" if the compilation and its resulting copyright are not used to limit the access or legal rights of the compilation's users beyond what the individual works permit. Inclusion of a covered work in an aggregate does not cause this License to apply to the other parts of the aggregate.

Conveying Non-Source Forms.

You may convey a covered work in object code form under the terms of sections 4 and 5, provided that you also convey the machine-readable Corresponding Source under the terms of this License, in one of these ways:

a) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by the Corresponding Source fixed on a durable physical medium customarily used for software interchange.

b) Convey the object code in, or embodied in, a physical product (including a physical distribution medium), accompanied by a written offer, valid for at least three years and valid for as long as you offer spare parts or customer support for that product model, to give anyone who possesses the object code either (1) a copy of the Corresponding Source for all the software in the product that is covered by this License, on a durable physical medium customarily used for software interchange, for a price no more than your reasonable cost of physically performing this conveying of source, or (2) access to copy the Corresponding Source from a network server at no charge.

c) Convey individual copies of the object code with a copy of the written offer to provide the Corresponding Source. This alternative is allowed only occasionally and noncommercially, and only if you received the object code with such an offer, in accord with subsection 6b.

d) Convey the object code by offering access from a designated place (gratis or for a charge), and offer equivalent access to the Corresponding Source in the same way through the same place at no further charge. You need not require recipients to copy the Corresponding Source along with the object code. If the place to copy the object code is a network server, the Corresponding Source may be on a different server (operated by you or a third party) that supports equivalent copying facilities, provided you maintain clear directions next to the object code saying where to find the Corresponding Source. Regardless of what server hosts the Corresponding Source, you remain obligated to ensure that it is available for as long as needed to satisfy these requirements.

e) Convey the object code using peer-to-peer transmission, provided you inform other peers where the object code and Corresponding Source of the work are being offered to the general public at no charge under subsection 6d. A separable portion of the object code, whose source code is excluded from the Corresponding Source as a System Library, need not be included in conveying the object code work.

A "User Product" is either (1) a "consumer product", which means any tangible personal property which is normally used for personal, family, or household purposes, or (2) anything designed or sold for incorporation into a dwelling. In determining whether a product is a consumer product, doubtful cases shall be resolved in favor of coverage. For a particular product received by a particular user, "normally used" refers to a typical or common use of that class of product, regardless of the status of the particular user or of the way in which the particular user actually uses, or expects or is expected to use, the product. A product is a consumer product regardless of whether the product has substantial commercial, industrial or non-consumer uses, unless such uses represent the only significant mode of use of the product. "Installation Information" for a User Product means any methods, procedures, authorization keys, or other information required to install and execute modified versions of a covered work in that User Product from a modified version of its Corresponding Source. The information must suffice to ensure that the continued functioning of the modified object code is in no case prevented or interfered with solely because

modification has been made. If you convey an object code work under this section in, or with, or specifically for use in, a User Product, and the conveying occurs as part of a transaction in which the right of possession and use of the User Product is transferred to the recipient in perpetuity or for a fixed term (regardless of how the transaction is characterized), the Corresponding Source conveyed under this section must be accompanied by the Installation Information. But this requirement does not apply if neither you nor any third party retains the ability to install modified object code on the User Product (for example, the work has been installed in ROM).

The requirement to provide Installation Information does not include a requirement to continue to provide support service, warranty, or updates for a work that has been modified or installed by the recipient, or for the User Product in which it has been modified or installed. Access to a network may be denied when the modification itself materially and adversely affects the operation of the network or violates the rules and protocols for communication across the network. Corresponding Source conveyed, and Installation Information provided, in accord with this section must be in a format that is publicly documented (and with an implementation available to the public in source code form), and must require no special password or key for unpacking, reading or copying.

Additional Terms.

"Additional permissions" are terms that supplement the terms of this License by making exceptions from one or more of its conditions. Additional permissions that are applicable to the entire Program shall be treated as though they were included in this License, to the extent that they are valid under applicable law. If additional permissions apply only to part of the Program, that part may be used separately under those permissions, but the entire Program remains governed by this License without regard to the additional permissions. When you convey a copy of a covered work, you may at your option remove any additional permissions from that copy, or from any part of it. (Additional permissions may be written to require their own removal in certain cases when you modify the work.) You may place additional permissions on material, added by you to a covered work, for which you have or can give appropriate copyright permission. Notwithstanding any other provision of this License, for material you add to a covered work, you may (if authorized by the copyright holders of that material) supplement the terms of this License with terms:

a) Disclaiming warranty or limiting liability differently from the terms of sections 15 and 16 of this License; or

b) Requiring preservation of specified reasonable legal notices or author attributions in that material or in the Appropriate Legal Notices displayed by works containing it; or

c) Prohibiting misrepresentation of the origin of that material, or requiring that modified versions of such material be marked in reasonable ways as different from the original version; or

d) Limiting the use for publicity purposes of names of licensors or authors of the material; or

e) Declining to grant rights under trademark law for use of some trade names, trademarks, or service marks; or

f) Requiring indemnification of licensors and authors of that material by anyone who conveys the material (or modified versions of it) with contractual assumptions of liability to the recipient, for any liability that these contractual assumptions directly impose on those licensors and authors.

All other non-permissive additional terms are considered "further restrictions" within the meaning of section 10. If the Program as you received it, or any part of it, contains a notice stating that it is governed by this License along with a term that is a further restriction, you may remove that term. If a license document contains a further restriction but permits relicensing or conveying under this

License, you may add to a covered work material governed by the terms of that license document, provided that the further restriction does not survive such relicensing or conveying. If you add terms to a covered work in accord with this section, you must place, in the relevant source files, a statement of the additional terms that apply to those files, or a notice indicating where to find the applicable terms.

Additional terms, permissive or non-permissive, may be stated in the form of a separately written license, or stated as exceptions; the above requirements apply either way.

Termination.

You may not propagate or modify a covered work except as expressly provided under this License. Any attempt otherwise to propagate or modify it is void, and will automatically terminate your rights under this License (including any patent licenses granted under the third paragraph of section 11).

However, if you cease all violation of this License, then your license from a particular copyright holder is reinstated (a) provisionally, unless and until the copyright holder explicitly and finally terminates your license, and (b) permanently, if the copyright holder fails to notify you of the violation by some reasonable means prior to 60 days after the cessation.

Moreover, your license from a particular copyright holder is reinstated permanently if the copyright holder notifies you of the violation by some reasonable means, this is the first time you have received notice of violation of this License (for any work) from that copyright holder, and you cure the violation prior to 30 days after your receipt of the notice.

Termination of your rights under this section does not terminate the licenses of parties who have received copies or rights from you under this License. If your rights have

been terminated and not permanently reinstated, you do not qualify to receive new licenses for the same material under section 10.

Acceptance Not Required for Having Copies. You are not required to accept this License in order to receive or run a copy of the Program. Ancillary propagation of a covered work occurring solely as a consequence of using peer-to-peer transmission to receive a copy likewise does not require acceptance. However, nothing other than this License grants you permission to propagate or modify any covered work. These actions infringe copyright if you do not accept this License. Therefore, by modifying or propagating a covered work, you indicate your acceptance of this License to do so.

Automatic Licensing of Downstream Recipients. Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. You are not responsible for enforcing compliance by third parties with this License. An "entity transaction" is a transaction transferring control of an organization, or substantially all assets of one, or subdividing an organization, or merging organizations. If propagation of a covered work results from an entity transaction, each party to that transaction who receives a copy of the work also receives whatever licenses to the work the party's predecessor in interest had or could give under the previous paragraph, plus a right to possession of the

Corresponding Source of the work from the predecessor in interest, if the predecessor has it or can get it with reasonable efforts. You may not impose any further restrictions on the exercise of the rights granted or affirmed under this License. For example, you may not impose a license fee, royalty, or other charge for exercise of rights granted under this License, and you may not initiate litigation (including a cross-claim or counterclaim in a lawsuit) alleging that any patent claim is infringed by making, using, selling, offering for sale, or importing the Program or any portion of it.

Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version. In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of

the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid. If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory

patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

No Surrender of Others' Freedom. If conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot convey a covered work so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not convey it at all. For example, if you agree to terms that obligate you to collect a royalty for further conveying from those to whom you convey the Program, the only way you could satisfy both those terms and this

License would be to refrain entirely from conveying the Program. Use with the GNU Affero General Public License. Notwithstanding any other provision of this License, you have permission to link or combine any covered work with a work licensed under version 3 of the GNU Affero General Public License into a single combined work, and to convey the resulting work. The terms of this License will continue to apply to the part which is the covered work, but the special requirements of the GNU Affero General Public License, section 13, concerning interaction through a network will apply to the combination as such.

Revised Versions of this License.

The Free Software Foundation may publish revised and/or new versions of the GNU General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns. Each version is given a distinguishing version number. If the Program specifies that a certain numbered version of the GNU General

Public License "or any later version" applies to it, you have the option of following the terms and conditions either of that numbered version or of any later version published by the Free Software

Foundation. If the Program does not specify a version number of the GNU General Public License, you may choose any version ever published by the Free Software Foundation.

If the Program specifies that a proxy can decide which future versions of the GNU General Public License can be used, that proxy's public statement of acceptance of a version permanently authorizes you to choose that version for the Program.

Later license versions may give you additional or different permissions. However, no additional obligations are imposed on any author or copyright holder as a result of your choosing to follow a later version.

Disclaimer of Warranty.

THERE IS NO WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW. EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

Limitation of Liability.

IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MODIFIES AND/OR CONVEYS THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Interpretation of Sections 15 and 16.

If the disclaimer of warranty and limitation of liability provided above cannot be given local legal effect according to their terms, reviewing courts shall apply local law that most closely approximates an absolute waiver of all civil liability in connection with the Program, unless a warranty or assumption of liability accompanies a copy of the Program in return for a fee.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest possible use to the public, the best way to achieve this is to make it free software which everyone can redistribute and change under these terms. To do so, attach the following notices to the program. It is safest to attach them to the start of each source file to most effectively state the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

<one line to give the program's name and a brief idea of what it does.>

Copyright (C) <year> <name of author>

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of

MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <http://www.gnu.org/licenses/>. Also add information on how to contact you by electronic and paper mail. If the program does terminal interaction, make it output a short notice like this when it starts in an interactive mode:

<program> Copyright (C) <year> <name of author>

This program comes with ABSOLUTELY NO WARRANTY; for details type `show w'.

This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, your program's commands might be different; for a GUI interface, you would use an "about box". You should also get your employer (if you work as a programmer) or school, if any, to sign a "copyright disclaimer" for the program, if necessary. For more information on this, and how to apply and follow the GNU GPL, see <http://www.gnu.org/licenses/>.

The GNU General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Lesser General Public License instead of this License. But first, please read

<http://www.gnu.org/philosophy/why-not-lgpl.html>.

X

Zope Public License (ZPL) Version 2.0

(Required) Enter introductory text here, including the definition and purpose of the concept.

Zope Public License (ZPL) Version 2.0

This software is Copyright (c) Zope Corporation (tm) and
Contributors. All rights reserved.

This license has been certified as open source. It has also
been designated as GPL compatible by the Free Software
Foundation (FSF).

Redistribution and use in source and binary forms, with or
without modification, are permitted provided that the
following conditions are met:

Redistributions in source code must retain the above
copyright notice, this list of conditions, and the following
disclaimer.

Redistributions in binary form must reproduce the above
copyright notice, this list of conditions, and the following
disclaimer in the documentation and/or other materials
provided with the distribution.

The name Zope Corporation (tm) must not be used to
endorse or promote products derived from this software
without prior written permission from Zope Corporation.

The right to distribute this software or to use it for
any purpose does not give you the right to use Servicemarks
(sm) or Trademarks (tm) of Zope Corporation. Use of them is
covered in a separate agreement (see
http://www.zope.com/Marks).

If any files are modified, you must cause the modified
files to carry prominent notices stating that you changed
the files and the date of any change.

Disclaimer

THIS SOFTWARE IS PROVIDED BY ZOPE CORPORATION ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL ZOPE CORPORATION OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This software consists of contributions made by Zope Corporation and many individuals on behalf of Zope Corporation. Specific attributions are listed in the accompanying credits file.

Y

ECLIPSE 2.0 License

Eclipse Public License - v 2.0

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS ECLIPSE PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1.DEFINITIONS

"Contribution" means:

a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and

b) in the case of each subsequent Contributor:

i) changes to the Program, and

ii) additions to the Program;

where such changes and/or additions to the Program originate from and are Distributed by that particular Contributor. A Contribution “originates” from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf. Contributions do not include changes or additions to the Program that are not Modified Works.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents " mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

“Derivative Works” shall mean any work, whether in Source Code or other form, that is based on (or derived from) the Program and for which the editorial revisions, annotations, elaborations, or other modifications represent, as a whole, an original work of authorship.

“Modified Works” shall mean any work in Source Code or other form that results from an addition to, deletion from, or modification of the contents of the Program, including, for purposes of clarity any new file in Source Code form that contains any contents of the Program. Modified Works shall not include works that contain only declarations, interfaces, types, classes, structures, or files of the Program solely in each case in order to link to, bind by name, or subclass the Program or Modified Works thereof.

“Distribute” means the acts of a) distributing or b) making available in any manner that enables the transfer of a copy.

“Source Code” means the form of a Program preferred for making modifications, including but not limited to software source code, documentation source, and configuration files.

“Secondary License” means either the GNU General Public License, Version 2.0, or any later versions of that license, including any exceptions or additional permissions as identified by the initial Contributor.

2. GRANT OF RIGHTS

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.

b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.

c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3.REQUIREMENTS

If a Contributor Distributes the Program in any form, then:

a) the Program must also be made available as Source Code, in accordance with section 3.2, and the Contributor must accompany the Program with a statement that the Source Code for the Program is available under this Agreement, and informs Recipients how to obtain it in a reasonable manner on or through a medium customarily used for software exchange; and

b) the Contributor may Distribute the Program under a license different than this Agreement, provided that such license:

i) effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;

ii) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;

iii) does not attempt to limit or alter the recipients' rights in the Source Code under section 3.2; and

iv) requires any subsequent distribution of the Program by any party to be under a license that satisfies the requirements of this section 3.

When the Program is Distributed as source code:

a) it must be made available under this Agreement, or if the Program (i) is combined with other material in a separate file or files made available under a Secondary License, and (ii) the initial Contributor attached to the Source Code the notice described in Exhibit A of this Agreement, then the Program may be made available under the terms of such Secondary Licenses, and

b) a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright, patent, trademark, attribution notices, disclaimers of warranty, or limitations of liability ('notices') contained within the Program from any copy of the Program which they Distribute, provided that Contributors may add their own appropriate notices.

4.COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY

EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7.GENERAL

If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.

If Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one other than the Agreement Steward has the right to modify this Agreement. The Eclipse Foundation is the initial Agreement Steward. The Eclipse Foundation may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version.

Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved. Nothing in this Agreement is intended to be enforceable by any entity that is not a Contributor or Recipient. No third-party beneficiary rights are created under this Agreement.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

Exhibit A – Form of Secondary Licenses Notice

“This Source Code may also be made available under the following Secondary Licenses when the conditions for such availability set forth in the Eclipse Public License, v. 2.0 are satisfied: {name license(s), version(s), and exceptions or additional permissions here}.”

Simply including a copy of this Agreement, including this Exhibit A is not sufficient to license the Source Code under Secondary Licenses.

If it is not possible or desirable to put the notice in a particular file, then You may include the notice in a location (such as a LICENSE file in a relevant directory) where a recipient would be likely to look for such a notice.

You may add additional accurate notices of copyright ownership.

Z

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE Version 1.1

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE Version 1.1 (CDDL-1.1)

1. Definitions.

- **1.1. Contributor** means each individual or entity that creates or contributes to the creation of Modifications.
- **1.2. Contributor Version** means the combination of the Original Software, prior Modifications used by a Contributor (if any), and the Modifications made by that particular Contributor.
- **1.3. Covered Software** means (a) the Original Software, or (b) Modifications, or (c) the combination of files containing Original Software with files containing Modifications, in each case including portions thereof.
- **1.4. Executable** means the Covered Software in any form other than Source Code.
- **1.5. Initial Developer** means the individual or entity that first makes Original Software available under this License.
- **1.6. Larger Work** means a work which combines Covered Software or portions thereof with code not governed by the terms of this License.
- **1.7. License** means this document.
- **1.8. Licensable** means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.
- **1.9. Modifications** means the Source Code and Executable form of any of the following:
  - **A.** Any file that results from an addition to, deletion from or modification of the contents of a file containing Original Software or previous Modifications;
  - **B.** Any new file that contains any part of the Original Software or previous Modification; or
  - **C.** Any new file that is contributed or otherwise made available under the terms of this License.
- **1.10. Original Software** means the Source Code and Executable form of computer software code that is originally released under this License.
- **1.11. Patent Claims** means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.
- **1.12. Source Code** means (a) the common form of computer software code in which modifications are made and (b) associated documentation included in or with such code.
- **1.13. You (or Your)** means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, You includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, control means (a) the power, direct or indirect, to cause the direction or

management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

2. License Grants.

- **2.1. The Initial Developer Grant.** Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, the Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license:
  - **(a)** under intellectual property rights (other than patent or trademark) Licensable by Initial Developer, to use, reproduce, modify, display, perform, sublicense and distribute the Original Software (or portions thereof), with or without Modifications, and/or as part of a Larger Work; and
  - **(b)** under Patent Claims infringed by the making, using or selling of Original Software, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Software (or portions thereof).
  - **(c)** The licenses granted in Sections 2.1(a) and (b) are effective on the date Initial Developer first distributes or otherwise makes the Original Software available to a third party under the terms of this License.
  - **(d)** Notwithstanding Section 2.1(b) above, no patent license is granted: (1) for code that You delete from the Original Software, or (2) for infringements caused by: (i) the modification of the Original Software, or (ii) the combination of the Original Software with other software or devices.
- **2.2. Contributor Grant.**

Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

- **(a)** under intellectual property rights (other than patent or trademark) Licensable by Contributor to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof), either on an unmodified basis, with other Modifications, as Covered Software and/or as part of a Larger Work; and
- **(b)** under Patent Claims infringed by the making, using, or selling of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: (1) Modifications made by that Contributor (or portions thereof); and (2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).
- **(c)** The licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first distributes or otherwise makes the Modifications available to a third party.
- **(d)** Notwithstanding Section 2.2(b) above, no patent license is granted: (1) for any code that Contributor has deleted from the Contributor Version; (2) for infringements caused by: (i) third party modifications of Contributor Version, or (ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or (3) under Patent Claims infringed by Covered Software in the absence of Modifications made by that Contributor.

3. Distribution Obligations.

- **3.1. Availability of Source Code.**

Any Covered Software that You distribute or otherwise make available in Executable form must also be made available in Source Code form and that Source Code form must be distributed only under the terms of this License. You must include a copy of this License with every copy of the Source Code form of the Covered Software You distribute or otherwise make available. You must inform recipients of any such Covered Software in Executable form as to how they can obtain such Covered Software in Source Code form in a reasonable manner on or through a medium customarily used for software exchange.

- **3.2. Modifications.**

The Modifications that You create or to which You contribute are governed by the terms of this License. You represent that You believe Your Modifications are Your original creation(s) and/or You have sufficient rights to grant the rights conveyed by this License.

- **3.3. Required Notices.**

You must include a notice in each of Your Modifications that identifies You as the Contributor of the Modification. You may not remove or alter any copyright, patent or trademark notices contained within the Covered Software, or any notices of licensing or any descriptive text giving attribution to any Contributor or the Initial Developer.

- **3.4. Application of Additional Terms.**

You may not offer or impose any terms on any Covered Software in Source Code form that alters or restricts the applicable version of this License or the recipients rights hereunder. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, you may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear that any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

- **3.5. Distribution of Executable Versions.**

You may distribute the Executable form of the Covered Software under the terms of this License or under the terms of a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable form does not attempt to limit or alter the recipients rights in the Source Code form from the rights set forth in this License. If You distribute the Covered Software in Executable form under a different license, You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or Contributor. You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

- **3.6. Larger Works.**

You may create a Larger Work by combining Covered Software with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Software.

4. Versions of the License.

- **4.1. New Versions.**

Sun Microsystems, Inc. is the initial license steward and may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version

number. Except as provided in Section 4.3, no one other than the license steward has the right to modify this License.

- **4.2. Effect of New Versions.**

You may always continue to use, distribute or otherwise make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. If the Initial Developer includes a notice in the Original Software prohibiting it from being distributed or otherwise made available under any subsequent version of the License, You must distribute and make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. Otherwise, You may also choose to use, distribute or otherwise make the Covered Software available under the terms of any subsequent version of the License published by the license steward.

- **4.3. Modified Versions.**

When You are an Initial Developer and You want to create a new license for Your Original Software, You may create and use a modified version of this License if You: (a) rename the license and remove any references to the name of the license steward (except to note that the license differs from this License); and (b) otherwise make it clear that the license contains terms which differ from this License.

5. DISCLAIMER OF WARRANTY.

COVERED SOFTWARE IS PROVIDED UNDER THIS LICENSE ON AN AS IS BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED SOFTWARE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGING. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED SOFTWARE IS WITH YOU. SHOULD ANY COVERED SOFTWARE PROVE DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED SOFTWARE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER.

6. TERMINATION.

- **6.1.** This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive.
- **6.2.** If You assert a patent infringement claim (excluding declaratory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You assert such claim is referred to as Participant) alleging that the Participant Software (meaning the Contributor Version where the Participant is a Contributor or the Original Software where the Participant is the Initial Developer) directly or indirectly infringes any patent, then any and all rights granted directly or indirectly to You by such Participant, the Initial Developer (if the Initial Developer is not the Participant) and all Contributors under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively and automatically at the expiration of such 60 day notice period, unless if within such 60 day period You withdraw Your claim with respect to the Participant Software against such Participant either unilaterally or pursuant to a written agreement with Participant.

6.3. In the event of termination under Sections 6.1 or 6.2 above, all end user licenses that have been validly granted by You or any distributor hereunder prior to termination (excluding licenses granted to You by any distributor) shall survive termination.

7. LIMITATION OF LIABILITY.

UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER TORT (INCLUDING NEGLIGENCE), CONTRACT, OR OTHERWISE, SHALL YOU, THE INITIAL DEVELOPER, ANY OTHER CONTRIBUTOR, OR ANY DISTRIBUTOR OF COVERED SOFTWARE, OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOST PROFITS, LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR LOSSES, EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM SUCH PARTYS NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

8. U.S. GOVERNMENT END USERS.

The Covered Software is a commercial item, as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of commercial computer software (as that term is defined at 48 C.F.R. 252.227-7014(a)(1)) and commercial computer software documentation as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Software with only those rights set forth herein. This U.S. Government Rights clause is in lieu of, and supersedes, any other FAR, DFAR, or other clause or provision that addresses Government rights in computer software under this License.

9. MISCELLANEOUS.

This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by the law of the jurisdiction specified in a notice contained within the Original Software (except to the extent applicable law, if any, provides otherwise), excluding such jurisdictions conflict-of-law provisions. Any litigation relating to this License shall be subject to the jurisdiction of the courts located in the jurisdiction and venue specified in a notice contained within the Original Software, with the losing party responsible for costs, including, without limitation, court costs and reasonable attorneys fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License. You agree that You alone are responsible for compliance with the United States export administration regulations (and the export control laws and regulation of any other countries) when You use, distribute or otherwise make available any Covered Software.

10. RESPONSIBILITY FOR CLAIMS.

As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

AA

Apple Public Source License Version 2.0 - August 6, 2003

APPLE PUBLIC SOURCE LICENSE Version 2.0 - August 6, 2003

Please read this License carefully before downloading this software. By downloading or using this software, you are agreeing to be bound by the terms of this License. If you do not or cannot agree to the terms of this License, please do not download or use the software.

Apple Note: In January 2007, Apple changed its corporate name from "Apple Computer, Inc." to "Apple Inc." This change has been reflected below and copyright years updated, but no other changes have been made to the APSL 2.0.

1. General; Definitions. This License applies to any program or other work which Apple Inc. ("Apple") makes publicly available and which contains a notice placed by Apple identifying such program or work as "Original Code" and stating that it is subject to the terms of this Apple Public Source License version 2.0 ("License"). As used in this License:

1.1 "Applicable Patent Rights" mean: (a) in the case where Apple is the grantor of rights, (i) claims of patents that are now or hereafter acquired, owned by or assigned to Apple and (ii) that cover subject matter contained in the Original Code, but only to the extent necessary to use, reproduce and/or distribute the Original Code without infringement; and (b) in the case where You are the grantor of rights, (i) claims of patents that are now or hereafter acquired, owned by or assigned to You and (ii) that cover subject matter in Your Modifications, taken alone or in combination with Original Code.

1.2 "Contributor" means any person or entity that creates or contributes to the creation of Modifications.

1.3 "Covered Code" means the Original Code, Modifications, the combination of Original Code and any Modifications, and/or any respective portions thereof.

1.4 "Externally Deploy" means: (a) to sublicense, distribute or otherwise make Covered Code available, directly or indirectly, to anyone other than You; and/or (b) to use Covered Code, alone or as part of a Larger Work, in any way to provide a service, including but not limited to delivery of content, through electronic communication with a client other than You.

1.5 "Larger Work" means a work which combines Covered Code or portions thereof with code not governed by the terms of this License.

1.6 "Modifications" mean any addition to, deletion from, and/or change to, the substance and/or structure of the Original Code, any previous Modifications, the combination of Original Code and any previous Modifications, and/or any respective portions thereof. When code is released as a series of files, a Modification is: (a) any addition to or deletion from the contents of a file containing Covered Code; and/or (b) any new file or other representation of computer program statements that contains any part of Covered Code.

1.7 "Original Code" means (a) the Source Code of a program or other work as originally made available by Apple under this License, including the Source Code of any updates or upgrades to such programs or works made available by Apple under this License, and that has been expressly identified by Apple as such in the header file(s) of such work; and (b) the

object code compiled from such Source Code and originally made available by Apple under this License

1.8 "Source Code" means the human readable form of a program or other work that is suitable for making modifications to it, including all modules it contains, plus any associated interface definition files, scripts used to control compilation and installation of an executable (object code).

1.9 "You" or "Your" means an individual or a legal entity exercising rights under this License. For legal entities, "You" or "Your" includes any entity which controls, is controlled by, or is under common control with, You, where "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of fifty percent (50%) or more of the outstanding shares or beneficial ownership of such entity.

2. Permitted Uses; Conditions & Restrictions. Subject to the terms and conditions of this License, Apple hereby grants You, effective on the date You accept this License and download the Original Code, a world-wide, royalty-free, non-exclusive license, to the extent of Apple's Applicable Patent Rights and copyrights covering the Original Code, to do the following:

2.1 Unmodified Code. You may use, reproduce, display, perform, internally distribute within Your organization, and Externally Deploy verbatim, unmodified copies of the Original Code, for commercial or non-commercial purposes, provided that in each instance: (a) You must retain and reproduce in all copies of Original Code the copyright and other proprietary notices and disclaimers of Apple as they appear in the Original Code, and keep intact all notices in the Original Code that refer to this License; and (b) You must include a copy of this License with every copy of Source Code of Covered Code and documentation You distribute or Externally Deploy, and You may not offer or impose any terms on such Source Code that alter or restrict this License or the recipients' rights hereunder, except as permitted under Section 6.

2.2 Modified Code. You may modify Covered Code and use, reproduce, display, perform, internally distribute within Your organization, and Externally Deploy Your Modifications and Covered Code, for commercial or non-commercial purposes, provided that in each instance You also meet all of these conditions:

(a) You must satisfy all the conditions of Section 2.1 with respect to the Source Code of the Covered Code;

(b) You must duplicate, to the extent it does not already exist, the notice in Exhibit A in each file of the Source Code of all Your Modifications, and cause the modified files to carry prominent notices stating that You changed the files and the date of any change; and

(c) If You Externally Deploy Your Modifications, You must make Source Code of all Your Externally Deployed Modifications either available to those to whom You have Externally Deployed Your Modifications, or publicly available. Source Code of Your Externally Deployed Modifications must be released under the terms set forth in this License, including the license grants set forth in Section 3 below, for as long as you Externally Deploy the Covered Code or twelve (12) months from the date of initial External Deployment, whichever is longer. You should preferably distribute the Source Code of Your Externally Deployed Modifications electronically (e.g. download from a web site).

2.3 Distribution of Executable Versions. In addition, if You Externally Deploy Covered Code (Original Code and/or Modifications) in object code, executable form only, You must include a prominent notice, in the code itself as well as in related documentation,

stating that Source Code of the Covered Code is available under the terms of this License with information on how and where to obtain such Source Code.

2.4 Third Party Rights. You expressly acknowledge and agree that although Apple and each Contributor grants the licenses to their respective portions of the Covered Code set forth herein, no assurances are provided by Apple or any Contributor that the Covered Code does not infringe the patent or other intellectual property rights of any other entity. Apple and each Contributor disclaim any liability to You for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, You hereby assume sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow You to distribute the Covered Code, it is Your responsibility to acquire that license before distributing the Covered Code.

3. Your Grants. In consideration of, and as a condition to, the licenses granted to You under this License, You hereby grant to any person or entity receiving or distributing Covered Code under this License a non-exclusive, royalty-free, perpetual, irrevocable license, under Your Applicable Patent Rights and other intellectual property rights (other than patent) owned or controlled by You, to use, reproduce, display, perform, modify, sublicense, distribute and Externally Deploy Your Modifications of the same scope and extent as Apple's licenses under Sections 2.1 and 2.2 above.

4. Larger Works. You may create a Larger Work by combining Covered Code with other code not governed by the terms of this License and distribute the Larger Work as a single product. In each such instance, You must make sure the requirements of this License are fulfilled for the Covered Code or any portion thereof.

5. Limitations on Patent License. Except as expressly stated in Section 2, no other patent rights, express or implied, are granted by Apple herein. Modifications and/or Larger Works may require additional patent licenses from Apple which Apple may grant in its sole discretion.

6. Additional Terms. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations and/or other rights consistent with the scope of the license granted herein ("Additional Terms") to one or more recipients of Covered Code. However, You may do so only on Your own behalf and as Your sole responsibility, and not on behalf of Apple or any Contributor. You must obtain the recipient's agreement that any such Additional Terms are offered by You alone, and You hereby agree to indemnify, defend and hold Apple and every Contributor harmless for any liability incurred by or claims asserted against Apple or such Contributor by reason of any such Additional Terms.

7. Versions of the License. Apple may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version number. Once Original Code has been published under a particular version of this License, You may continue to use it under the terms of that version. You may also choose to use such Original Code under the terms of any subsequent version of this License published by Apple. No one other than Apple has the right to modify the terms applicable to Covered Code created under this License.

8. NO WARRANTY OR SUPPORT. The Covered Code may contain in whole or in part pre-release, untested, or not fully tested works. The Covered Code may contain errors that could cause failures or loss of data, and may be incomplete or contain inaccuracies. You expressly acknowledge and agree that use of the Covered Code, or any portion thereof, is at Your sole and entire risk.

THE COVERED CODE IS PROVIDED "AS IS" AND WITHOUT WARRANTY, UPGRADES OR SUPPORT OF ANY KIND AND APPLE AND APPLE'S LICENSOR(S) (COLLECTIVELY REFERRED TO AS "APPLE" FOR THE PURPOSES OF SECTIONS 8 AND 9) AND ALL CONTRIBUTORS EXPRESSLY DISCLAIM ALL WARRANTIES AND/OR CONDITIONS,

EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES AND/OR CONDITIONS OF MERCHANTABILITY, OF SATISFACTORY QUALITY, OF FITNESS FOR A PARTICULAR PURPOSE, OF ACCURACY, OF QUIET ENJOYMENT, AND NONINFRINGEMENT OF THIRD PARTY RIGHTS. APPLE AND EACH CONTRIBUTOR DOES NOT WARRANT AGAINST INTERFERENCE WITH YOUR ENJOYMENT OF THE COVERED CODE, THAT THE FUNCTIONS CONTAINED IN THE COVERED CODE WILL MEET YOUR REQUIREMENTS, THAT THE OPERATION OF THE COVERED CODE WILL BE UNINTERRUPTED OR ERROR-FREE, OR THAT DEFECTS IN THE COVERED CODE WILL BE CORRECTED. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY APPLE, AN APPLE AUTHORIZED REPRESENTATIVE OR ANY CONTRIBUTOR SHALL CREATE A WARRANTY.

You acknowledge that the Covered Code is not intended for use in the operation of nuclear facilities, aircraft navigation, communication systems, or air traffic control machines in which case the failure of the Covered Code could lead to death, personal injury, or severe physical or environmental damage.

9. LIMITATION OF LIABILITY. TO THE EXTENT NOT PROHIBITED BY LAW, IN NO EVENT SHALL APPLE OR ANY CONTRIBUTOR BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR RELATING TO THIS LICENSE OR YOUR USE OR INABILITY TO USE THE COVERED CODE, OR ANY PORTION THEREOF, WHETHER UNDER A THEORY OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), PRODUCTS LIABILITY OR OTHERWISE, EVEN IF APPLE OR SUCH CONTRIBUTOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY. SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OF LIABILITY OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS LIMITATION MAY NOT APPLY TO YOU. In no event shall Apple's total liability to You for all damages (other than as may be required by applicable law) under this License exceed the amount of fifty dollars ($50.00).

10. Trademarks. This License does not grant any rights to use the trademarks or trade names "Apple", "Mac", "Mac OS", "QuickTime", "QuickTime Streaming Server" or any other trademarks, service marks, logos or trade names belonging to Apple (collectively "Apple Marks") or to any trademark, service mark, logo or trade name belonging to any Contributor. You agree not to use any Apple Marks in or as part of the name of products derived from the Original Code or to endorse or promote products derived from the Original Code other than as expressly permitted by and in strict compliance at all times with Apple's third party trademark usage guidelines which are posted at http://www.apple.com/legal/guidelinesfor3rdparties.html.

11. Ownership. Subject to the licenses granted under this License, each Contributor retains all rights, title and interest in and to any Modifications made by such Contributor. Apple retains all rights, title and interest in and to the Original Code and any Modifications made by or on behalf of Apple ("Apple Modifications"), and such Apple Modifications will not be automatically subject to this License. Apple may, at its sole discretion, choose to license such Apple Modifications under this License, or on different terms from those contained in this License or may choose not to license them at all. 12. Termination.

12.1 Termination. This License and the rights granted hereunder will terminate:

(a) automatically without notice from Apple if You fail to comply with any term(s) of this License and fail to cure such breach within 30 days of becoming aware of such breach;

(b) immediately in the event of the circumstances described in Section 13.5(b); or (c) automatically without notice from Apple if You, at any time during the term of this License, commence an action for patent infringement against Apple; provided that Apple did not first commence an action for patent infringement against You in that instance.

12.2 Effect of Termination. Upon termination, You agree to immediately stop any further use, reproduction, modification, sublicensing and distribution of the Covered Code. All sublicenses to the Covered Code which have been properly granted prior to termination shall survive any termination of this License. Provisions which, by their nature, should remain in effect beyond the termination of this License shall survive, including but not limited to Sections 3, 5, 8, 9, 10, 11, 12.2 and 13. No party will be liable to any other for compensation, indemnity or damages of any sort solely as a result of terminating this License in accordance with its terms, and termination of this License will be without prejudice to any other right or remedy of any party.

13. Miscellaneous.

13.1 Government End Users. The Covered Code is a "commercial item" as defined in FAR 2.101. Government software and technical data rights in the Covered Code include only those rights customarily provided to the public as defined in this License. This customary commercial license in technical data and software is provided in accordance with FAR 12.211 (Technical Data) and 12.212 (Computer Software) and, for Department of Defense purchases, DFAR 252.227-7015 (Technical Data -- Commercial Items) and 227.7202-3 (Rights in Commercial Computer Software or Computer Software Documentation). Accordingly, all U.S. Government End Users acquire Covered Code with only those rights set forth herein.

13.2 Relationship of Parties. This License will not be construed as creating an agency, partnership, joint venture or any other form of legal association between or among You, Apple or any Contributor, and You will not represent to the contrary, whether expressly, by implication, appearance or otherwise.

13.3 Independent Development. Nothing in this License will impair Apple's right to acquire, license, develop, have others develop for it, market and/or distribute technology or products that perform the same or similar functions as, or otherwise compete with, Modifications, Larger Works, technology or products that You may develop, produce, market or distribute.

13.4 Waiver; Construction. Failure by Apple or any Contributor to enforce any provision of this License will not be deemed a waiver of future enforcement of that or any other provision. Any law or regulation which provides that the language of a contract shall be construed against the drafter will not apply to this License.

13.5 Severability. (a) If for any reason a court of competent jurisdiction finds any provision of this License, or portion thereof, to be unenforceable, that provision of the License will be enforced to the maximum extent permissible so as to effect the economic benefits and intent of the parties, and the remainder of this License will continue in full force and effect. (b) Notwithstanding the foregoing, if applicable law prohibits or restricts You from fully and/or specifically complying with Sections 2 and/or 3 or prevents the enforceability of either of those Sections, this License will immediately terminate and You must immediately discontinue any use of the Covered Code and destroy all copies of it that are in your possession or control.

13.6 Dispute Resolution. Any litigation or other dispute resolution between You and Apple relating to this License shall take place in the Northern District of California, and You and Apple hereby consent to the personal jurisdiction of, and venue in, the state and federal courts within that District with respect to this License. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded.

13.7 Entire Agreement; Governing Law. This License constitutes the entire agreement between the parties with respect to the subject matter hereof. This License shall be governed by the laws of the United States and the State of California, except that body of California law concerning conflicts of law.

Where You are located in the province of Quebec, Canada, the following clause applies: The parties hereby confirm that they have requested that this License and all related documents be drafted in English. Les parties ont exigÃ© que le prÃ©sent contrat et tous les documents connexes soient rÃ©digÃ©s en anglais.

EXHIBIT A.

"Portions Copyright (c) 1999-2007 Apple Inc. All Rights Reserved.

This file contains Original Code and/or Modifications of Original Code as defined in and that are subject to the Apple Public Source License Version 2.0 (the 'License'). You may not use this file except in compliance with the License. Please obtain a copy of the License at http://www.opensource.apple.com/apsl/ and read it before using this file.

The Original Code and all software distributed under the License are distributed on an 'AS IS' basis, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, AND APPLE HEREBY DISCLAIMS ALL SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT OR NON-INFRINGEMENT. Please see the License for the specific language governing rights and limitations under the License."