Oracle Hospitality OPERA Property Management

Licensing Information User Manual

ORACLE®

Oracle Hospitality OPERA Property Management Licensing Information User Manual Release 5.6.27

E73166-04

Contents

Preface

Purpose

This document contains licensing information for Oracle Hospitality OPERA Property Management products.

Audience

This document is intended for users of Oracle Hospitality OPERA Property Management.

Customer Support

To contact Oracle Customer Support, access the Customer Support Portal at the following URL:

https://iccp.custhelp.com

When contacting Customer Support, please provide the following:

- Product version and program/module name
- Functional and technical description of the problem (include business impact)
- Detailed step-by-step instructions to re-create
- Exact error message received
- Screen shots of each step you take

Documentation

Oracle Hospitality product documentation is available on the Oracle Help Center at

http://docs.oracle.com/en/industries/hospitality/

Table 1 Revision History

Date	Description
August 2018	• Initial publication
July 2020	• Added maximum allowable active application functions to Part numbers 5110-018 and 5110-052
February 2025	• Updated the format and included the document with a new template.
	• Updated content across Licensing Information chapter and third-party notices section for 5.6.27 release.

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

This chapter provides the following licensing information for Oracle® Hospitality Payment Interface:

- Description of products.

- Prerequisite products.

- Entitled products and restricted use licenses.

Hospitality Product	Subproduct	Licensing Information
Oracle Hospitality OPERA 5 Hotel Property Systems	Oracle Hospitality OPERA 5 Property Premium Part Number: 5100-060	**Product Editions and Permitted Features** Supports full service hotels (which generally includes larger hotels, luxury hotels, resort hotels, and casino hotels) where guests expect a full spectrum of services and amenities. The OPERA 5 Property Premium license also provides access to appropriate OPERA internal interfaces and OPERA interfaces to Oracle Hospitality Point of Sale (POS). **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Premium: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Premium **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA 5 Property Standard Part Number: 5110-018	**Product Editions and Permitted Features** Provides a scaled-down edition of the Premium version. Supports a feature set for hotels that need functionality beyond the base set provided in the Lite Property Management Services, but not all of the features and capabilities appropriate for a full service hotel. Extended stay and residence hotels would likely fall into this category. Allows the maximum of 55 application functions to be active at one time. The OPERA 5 Property Standard license also provides access to appropriate OPERA internal interfaces and OPERA interfaces to Oracle Hospitality Point of Sale (POS). **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Standard: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Standard **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA 5 Property Lite Part Number: 5110-502	**Product Editions and Permitted Features** Supports a base set of Property Service functionality appropriate for smaller properties or those offering limited services. Allows a maximum of 30 application functions to be active at one time. The OPERA 5 Property Lite license also provides access to appropriate OPERA internal interfaces and OPERA interfaces to Oracle Hospitality Point of Sale (POS). **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Lite: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA 5 Property Sales and Catering Premium Part Number: 5300-034	**Product Editions and Permitted Features** Integrated with Oracle Hospitality Property Premium, Standard, or Lite, Oracle Hospitality OPERA Property Management Property Sales and Catering Premium provides a full range of Sales and Catering tools for managing sales, accounts and contacts, activities, group business, catering events, menus, and resources. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Sales and Catering Premium: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Premium **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA 5 Property Sales and Catering Standard Part Number: 5310-014	**Product Editions and Permitted Features** Integrated with Oracle Hospitality OPERA Property Management Premium, Standard, or Lite, Oracle Hospitality OPERA Property Management Property Sales and Catering Property Standard includes tools for managing accounts, contacts and activities, group business, events and function space inventory. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Sales and Catering Standard: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Standard **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA 5 Property Sales and Catering Lite Part Number: 5300-035	**Product Editions and Permitted Features** Integrated with Oracle Hospitality OPERA Property Management Property Premium, Standard, or Lite, Oracle Hospitality OPERA Property Sales and Catering Lite provides basic sales tools for streamlining sales and managing accounts, contacts, and activities. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Sales and Catering Lite: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA 5 Venue Management Part Number: L105499	**Product Editions and Permitted Features** As a standalone product not integrated with a property management system, Venue Management offers non-hotel sites such as stadiums, arenas, and leisure parks the ability to manage the function and event space. Service is available on a per user basis. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Venue Management: • Oracle Hospitality Technology Foundation for Sales Systems **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
Oracle Hospitality OPERA 5 Hotel Central Systems	Oracle Hospitality OPERA 5 Room Reservations Part Number: 5500-024	**Product Editions and Permitted Features** Consists of those features and capabilities needed by a central reservation organization when creating and managing reservations for one or multiple properties. This includes tools for querying availability across properties, accessing profiles, making reservations, and composing stay itineraries. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Room Reservations: • Oracle Hospitality Technology Foundation for Hotel Central Office Systems **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA 5 Customer Loyalty Tracking Part Number: 5140-021	**Product Editions and Permitted Features** Tracks guest profile information along with membership bonus points, promotions, and award point consumption. Affiliations between guests and other designated groups are recorded to allow the guest to negotiate rates. Agents can be associated with a guest to specify commissions when a reservation is made. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Customer Loyalty Tracking: • Oracle Hospitality Technology Foundation for Hotel Central Office Systems **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA 5 Central Sales Part Number: 5320-013	**Product Editions and Permitted Features** Maximizes sales for the chain at large, regardless of where the business may materialize. Features include guest room and function space availability across the entire enterprise. Prospective business leads can be sent to selected chain properties based on customer preference and hotel features and FIT contracts are available for negotiating contracts and monitoring production. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Central Sales: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Premium, or • Oracle Hospitality Technology Foundation for Hotel Central Office Systems **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
Oracle Hospitality Technology Foundation	Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Premium Part Number: L101204	**Product Editions and Permitted Features** Base product purchased once to use with one or more of the prerequisite products. **Prerequisite Products** A license to use the following products are a prerequisite to license and use Technology Foundation for Hotel Property Systems - OPERA 5 Premium: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Sales and Catering Premium **Entitled Products and Restricted Use Licenses** A license for Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Premium contains restricted-use licenses for its components: Oracle DB Enterprise Edition (with the following options - RA, RAC one node, Active Data Guard, Partitioning, RAT, Advanced Compression, Advanced Security, Label Security, Database Vault, OLAP, Advanced Analytics, Spatial and Graph, TimesTen Application-Tier DB Cache, Database in-memory), DB Enterprise Management Diagnostic and Tuning Packs, Lifecycle Management Pack, WebLogic Suite, Identity and Access Management Suite+, SOA Suite, and Oracle Business Intelligence Suite Extended Edition. The Oracle Hospitality Technology Foundation Programs may only be used with Oracle Hospitality Hotel Programs. New reports or customizations of the included reports are allowed. Integration to third party systems is only allowed via the Oracle Hospitality Interface Programs, data integration extracts and/or APIs. You may not add unsupported applications to the environments created with this Program. You are allowed to host data elements originating only from the Oracle Hospitality Programs in the schemas created with the use of this Program. You may not host any third party data elements.

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Standard Part Number: L101207	**Product Editions and Permitted Features** Base product purchased once to use with one or more of the prerequisite products. **Prerequisite Products** A license to use the following products are a prerequisite to license and use Technology Foundation for Hotel Property Systems - OPERA 5 Standard: • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Sales and Catering Standard **Entitled Products and Restricted Use Licenses** A license for Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Standard contains restricted-use licenses for its components: Oracle DB Enterprise Edition (with the following options - RA, RAC one node, Active Data Guard, Partitioning, RAT, Advanced Compression, Advanced Security, Label Security, Database Vault, OLAP, Advanced Analytics, Spatial and Graph, TimesTen Application-Tier DB Cache, Database in-memory), DB Enterprise Management Diagnostic and Tuning Packs, Lifecycle Management Pack, WebLogic Suite, Identity and Access Management Suite+, SOA Suite, and Oracle Business Intelligence Suite Extended Edition. The Oracle Hospitality Technology Foundation Programs may only be used with Oracle Hospitality Hotel Programs. New reports or customizations of the included reports are allowed. Integration to third party systems is only allowed via the Oracle Hospitality Interface Programs, data integration extracts and/or APIs. You may not add unsupported applications to the environments created with this Program. You are allowed to host data elements originating only from the Oracle Hospitality Programs in the schemas created with the use of this Program. You may not host any third party data elements.

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Lite Part Number: L101210	**Product Editions and Permitted Features** Base product purchased once to use with one or more of the prerequisite products. **Prerequisite Products** A license to use the following products are a prerequisite to license and use Technology Foundation for Hotel Property Systems - OPERA 5 Lite: • Oracle Hospitality OPERA 5 Property Lite, or • Oracle Hospitality Suite8 Property Professional Edition (EMEA and APAC Regions), or • Oracle Hospitality Suite8 Property Resort Edition (EMEA and APAC Regions), or • Oracle Hospitality Suite8 Property Small Business Edition (EMEA and APAC Regions), or • Oracle Hospitality Suite8 Conference and Catering Base (EMEA and APAC Regions) **Entitled Products and Restricted Use Licenses** A license for Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Lite contains restricted-use licenses for its components: Oracle DB Enterprise Edition (with the following options - RA, RAC one node, Active Data Guard, Partitioning, RAT, Advanced Compression, Advanced Security, Label Security, Database Vault, OLAP, Advanced Analytics, Spatial and Graph, TimesTen Application-Tier DB Cache, Database in-memory), DB Enterprise Management Diagnostic and Tuning Packs, Lifecycle Management Pack, WebLogic Suite, Identity and Access Management Suite+, SOA Suite, and Oracle Business Intelligence Suite Extended Edition. The Oracle Hospitality Technology Foundation Programs may only be used with Oracle Hospitality Hotel Programs. New reports or customizations of the included reports are allowed. Integration to third party systems is only allowed via the Oracle Hospitality Interface Programs, data integration extracts and/or APIs. You may not add unsupported applications to the environments created with this Program. You are allowed to host data elements originating only from the Oracle Hospitality Programs in the schemas created with the use of this Program. You may not host any third party data elements.

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality Technology Foundation for Hotel Central Office Systems Part Number: L101213	**Product Editions and Permitted Features** Base product purchased once to use with the prerequisite product. **Prerequisite Products** A license to use the following products are a prerequisite to license and use Technology Foundation for Hotel Central Office Systems: • Oracle Hospitality OPERA 5 Room Reservations • Oracle Hospitality OPERA 5 Customer Loyalty Tracking **Entitled Products and Restricted Use Licenses** A license for Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Standard contains restricted-use licenses for its components: Oracle DB Enterprise Edition (with the following options - RA, RAC one node, Active Data Guard, Partitioning, RAT, Advanced Compression, Advanced Security, Label Security, Database Vault, OLAP, Advanced Analytics, Spatial and Graph, TimesTen Application-Tier DB Cache, Database in-memory), DB Enterprise Management Diagnostic and Tuning Packs, Lifecycle Management Pack, WebLogic Suite, Identity and Access Management Suite+, SOA Suite, and Oracle Business Intelligence Suite Extended Edition. The Oracle Hospitality Technology Foundation Programs may only be used with Oracle Hospitality Hotel Programs. New reports or customizations of the included reports are allowed. Integration to third party systems is only allowed via the Oracle Hospitality Interface Programs, data integration extracts and/or APIs. You may not add unsupported applications to the environments created with this Program. You are allowed to host data elements originating only from the Oracle Hospitality Programs in the schemas created with the use of this Program. You may not host any third party data elements.

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality Technology Foundation for Sales Systems Part Number: L105498	**Product Editions and Permitted Features** Base product purchased once to use with one or more of the prerequisite products. **Prerequisite Products** A license to use the following products are a prerequisite to license and use Technology Foundation for Sales Systems: • Oracle Hospitality OPERA 5 Venue Management, or • Oracle Hospitality OPERA 5 Central Sales **Entitled Products and Restricted Use Licenses** A license for Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Standard contains restricted-use licenses for its components: Oracle DB Enterprise Edition (with the following options - RA, RAC one node, Active Data Guard, Partitioning, RAT, Advanced Compression, Advanced Security, Label Security, Database Vault, OLAP, Advanced Analytics, Spatial and Graph, TimesTen Application-Tier DB Cache, Database in-memory), DB Enterprise Management Diagnostic and Tuning Packs, Lifecycle Management Pack, WebLogic Suite, Identity and Access Management Suite+, SOA Suite, and Oracle Business Intelligence Suite Extended Edition. The Oracle Hospitality Technology Foundation Programs may only be used with Oracle Hospitality Hotel Programs. New reports or customizations of the included reports are allowed. Integration to third party systems is only allowed via the Oracle Hospitality Interface Programs, data integration extracts and/or APIs. You may not add unsupported applications to the environments created with this Program. You are allowed to host data elements originating only from the Oracle Hospitality Programs in the schemas created with the use of this Program. You may not host any third party data elements.

Hospitality Product	Subproduct	Licensing Information
Oracle Hospitality OPERA Property Management Add-Ons	Oracle Hospitality OPERA Hotel Mobile Part Number: L104989	**Product Editions and Permitted Features** Oracle Hospitality OPERA Hotel Mobile is an integrated hotel management mobile solution which can be used to manage front office and guest operations on a mobile device. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Hotel Mobile: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** A license for OPERA Hotel Mobile also contains the subproduct Oracle Hospitality OPERA Web Self Service. Entitlement of OPERA Web Self Service is limited to OPERA Hotel Mobile and may not be used or deployed for other purposes. The OPERA Web Self Service license must be purchased separately if used outside of OPERA Hotel Mobile.
	Oracle Hospitality OPERA 5 Vacation Ownership System Part Number: 5170-007	**Product Editions and Permitted Features** Re-encrypts and replaces all data with newly encrypted data. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Vacation Ownership System: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Advanced Reporting and Analytics Part Number: 5160-007	**Product Editions and Permitted Features** Provides hundreds of metrics to help with queries that show past, present, and future trends for a single property or across the enterprise. Data is globally consolidated from all applications in the database and displayed in an easy-to-understand visual representation to help decision-making. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Advanced Reporting and Analytics: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite, or • Oracle Hospitality OPERA 5 Customer Loyalty Tracking, or • Oracle Hospitality OPERA 5 Room Reservations **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Export Files Part Number: 5100-005	**Product Editions and Permitted Features** Accesses Export File Utility OPERA Membership Exports. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Export Files: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard. or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Back Office Part Number: 5100-003	**Product Editions and Permitted Features** Extracts financial and statistical data from the Oracle Hospitality Hotel Property Services to be imported into Back Office Software. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Back Office: - Oracle Hospitality OPERA 5 Property Premium, or - Oracle Hospitality OPERA 5 Property Standard, or - Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Property Kiosk Interface Part Number: 5100-041	**Product Editions and Permitted Features** Accesses the Generic interface for guest-facing self-service such as check in, checkout, invoice preview. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Property Kiosk Interface: - Oracle Hospitality OPERA 5 Property Premium, or - Oracle Hospitality OPERA 5 Property Standard, or - Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA EFT Dynamic Currency Conversion Part Number: 5100-038	**Product Editions and Permitted Features** Allows properties to handle dual currency credit card collection from guests making settlement at the hotel. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA EFT Dynamic Currency Conversion: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite, and a • Compatible Oracle Hospitality OPERA Electronic Funds Transfer Interface **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Electronic Signature Capture for Orion Software Part Number: 5100-067	**Product Editions and Permitted Features** Captures an electronic signature for a registration card using a tablet PC, or similar device, and to create a secure encrypted file when active. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Electronic Signature Capture for Orion Software: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard. or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA ID Document Scanning Part Number: 5100-081	**Product Editions and Permitted Features** Scans an ID document such as a passport or driver's license and updates the various ID fields of the guest profile record through the interface. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA ID Document Scanning: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard. or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Credit Card Encryption Rotation Part Number: OCER-001	**Product Editions and Permitted Features** Re-encrypts and replaces all data with newly encrypted data. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Credit Card Encryption Rotation: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Address Cleansing Vendor Integration Part Number L104986	**Product Editions and Permitted Features** Address Cleansing partners can integrate through this interface to provide their services to profiles stored in the application. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Address Cleansing Vendor Integration: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite, or • Oracle Hospitality OPERA 5 Customer Loyalty Tracking, or • Oracle Hospitality OPERA 5 Room Reservations **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Virtual Room Numbers (Direct Inward Dialing) Part Number: 5100-008	**Product Editions and Permitted Features** Virtual Numbers allow the guest to be contacted from outside without having to go through the operator. The numbers are taken from a pool and are assigned to the guest or the room. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Virtual Room Numbers (Direct Inward Dialing): • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Comp Accounting Part Number: 5100-032	**Product Editions and Permitted Features** Includes Comp Routing, Authorizers, and Routing Limits. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Comp Accounting: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Multiproperty Cross Profiles and Configuration Part Number: 5100-007	**Product Editions and Permitted Features** Provides the capability to enter and maintain profiles across multiple properties. Options: • Oracle Hospitality OPERA Multiproperty Cross Postings, Part Number: 5100-019 • Oracle Hospitality OPERA Multiproperty Cross Postings, Part Number: 5100-019 **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Multiproperty Cross Profiles and Configuration: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Web Self Service Part Number: 5051-019	**Product Editions and Permitted Features** Includes a collection of web services that provide access to key functionality of Oracle Hospitality OPERA Property Management, such as Availability, Reservations, Profiles, and Membership handling. Oracle Hospitality OPERA Web Self Service also includes the components: Web Users, Profile Management, and Points Tracking. Options: • Oracle Hospitality OPERA for RoomKey.com Online Travel Agency Interface, Part Number: 5051-025 **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Web Self Service: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite, or • Oracle Hospitality OPERA 5 Customer Loyalty Tracking, or • Oracle Hospitality OPERA 5 Room Reservations **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Membership for Frequent Guest and Flyer Part Number: 5100-006	**Product Editions and Permitted Features** Includes functionality for airline frequent flyer programs and property guest loyalty programs. Options: • Oracle Hospitality OPERA Membership Export, Part Number: 5100-015 **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Membership for Frequent Guest and Flyer: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Commission Handling Part Number: 5100-013	**Product Editions and Permitted Features** Includes file export functionality that is used within the Commission Handling module and allows file sending to a third party. Options: • Oracle Hospitality OPERA Electronic Commission Data Transfer for World Travel Payment, Part Number: 5100-002 • Oracle Hospitality OPERA Electronic Commission Data Transfer for Pegasus Systems (HCC), Part Number: 5100-020 • Oracle Hospitality OPERA Electronic Commission Data Transfer for National Processing Company, Part Number: 5100-035 • Oracle Hospitality OPERA Electronic Commission Data Transfer for Eruca Global Services, Part Number: 5100-030 • Oracle Hospitality OPERA Electronic Commission Data Transfer for Infinium, Part Number: 5100-04 **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA 5 Sales and Catering Multiproperty Base Part Number: 5300-004	**Product Editions and Permitted Features** Enables bookings of groups and events across properties. Options • Oracle Hospitality OPERA 5 Sales and Catering Multiproperty Group Room Control and Function Diary, Part Number: 5300-006 **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Sales and Catering Multiproperty Base: • Oracle Hospitality OPERA 5 Sales and Catering Premium, or • Oracle Hospitality OPERA 5 Sales and Catering Standard, or • Oracle Hospitality OPERA 5 Sales and Catering Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA 5 Sales and Catering Reporting and Analytics Part Number: 5300-038	**Product Editions and Permitted Features** Provides ad hoc reporting for Oracle Hospitality OPERA Sales and Catering with graphical representation and drill-down capabilities. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Sales and Catering Reporting and Analytics: • Oracle Hospitality OPERA 5 Sales and Catering Premium, or • Oracle Hospitality OPERA 5 Sales and Catering Standard, or • Oracle Hospitality OPERA 5 Sales and Catering Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA 5 Sales and Catering Web Self-Service Part Number: L102900	**Product Editions and Permitted Features** Includes a collection of web services that provide access to the key functionality of Sales and Catering. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Sales and Catering Web Self-Service: • Oracle Hospitality OPERA 5 Sales and Catering Premium, or • Oracle Hospitality OPERA 5 Sales and Catering Standard, or • Oracle Hospitality OPERA 5 Sales and Catering Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Building Management System Interface Part Number: L102911	**Product Editions and Permitted Features** Supports main functionality used for data exchange between Oracle OPERA Hotel Property Management system and Hotel Building Management / Energy Management systems. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Building Management System Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Call Accounting System Interface Part Number: L102912	**Product Editions and Permitted Features** Supports simple phone charge and Room maid status notification handling from Telephone systems who do not need check in / out data as used for Telephony Management System Interface. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Call Accounting System Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Electronic Funds Transfer Interface Part Number: L102913	**Product Editions and Permitted Features** Supports main functionality used for data exchange between Oracle Hospitality OPERA Property Management system and EFT Vendor systems for Payment processing. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Electronic Funds Transfer Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Key Services System Interface Part Number: L102914	**Product Editions and Permitted Features** Supports main functionality used for data exchange between Oracle Hospitality OPERA Property Management system and Door Locking Systems. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Key Services System Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Minibar System Interface Part Number: L102915	**Product Editions and Permitted Features** Supports main functionality used for data exchange between Oracle Hospitality OPERA Property Management system and external Minibar Systems not integrated into Telephone or Video systems. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Minibar System Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Voice Mail System Interface Part Number: L102916	**Product Editions and Permitted Features** Supports main functionality used for data exchange between Oracle Hospitality OPERA Property Management system and external Voicemail systems not integrated into Telephone systems. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Voice Mail System Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Point-of Sale System Interface Part Number: L102917	**Product Editions and Permitted Features** Supports main functionality used for data exchange between Oracle Hospitality OPERA Property Management system and Point of Sale systems (Restaurant POS, SPA, Golf). **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Point-of Sale System Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Telephony Management System Interface Part Number: L102918	**Product Editions and Permitted Features** Supports main functionality used for data exchange between Oracle Hospitality OPERA Property Management system and Telephone Management systems or Middleware connecting to Telephone Systems. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Telephony Management System Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Video Services Interface Part Number: L102919	**Product Editions and Permitted Features** Supports main functionality used for data exchange between Oracle Hospitality OPERA Property Management system and Hotel Room Video Systems or IPTV systems. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Video Services Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Internet Posting System Interface Part Number: L102920	**Product Editions and Permitted Features** Supports main functionality used for data exchange between Oracle Hospitality OPERA Property Management system and In-Hotel HSIA / WWW Systems serving guests' access to the internet. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Internet Posting System Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Miscellaneous System Interface Part Number: L102921	**Product Editions and Permitted Features** Supports main functionality used for data exchange Oracle Hospitality OPERA Property Management system and systems not being categorized in other listed Interface types or serving multiple functionality. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A
Oracle Hospitality OPERA Hotel Property and Central Systems Interfaces	Oracle Hospitality OPERA Reservation System ADS Interface Part Number: L102906	**Product Editions and Permitted Features** Provides Alternate Distribution System (ADS) channel type. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Reservation System ADS Interface: • Oracle Hospitality OPERA 5 Room Reservations **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Reservation System GDS Interface Part Number: L102818	**Product Editions and Permitted Features** Provides Global Distribution System (GDS) channel type. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Reservation System GDS Interface: • Oracle Hospitality OPERA 5 Room Reservations **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Exchange Interface One-Way Part Number: L102904	**Product Editions and Permitted Features** OPERA Exchange Interface (OXI) One-Way sends messages one way from an external system to OPERA or from OPERA to the external system. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Exchange Interface One-Way: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite, or • Oracle Hospitality OPERA 5 Room Reservations **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Exchange Interface Two-Way Part Number: L102905	**Product Editions and Permitted Features** Oracle Hospitality OPERA Exchange Interface (OXI) Two-Way sends information to and from OPERA. Prerequisite Products A license to use the following products are a prerequisite to license and use OPERA Exchange Interface Two-Way: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite, or • Oracle Hospitality OPERA 5 Room Reservations **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA HTNG Interface Part Number: L102908	**Product Editions and Permitted Features** Hotel Technology Next Generation (HTNG) provides access to third-party Activity Reservation Systems (ATS) that share a variety of information related to a guest's stay. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA HTNG Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Yield Interface Limited Part Number: L102903	**Product Editions and Permitted Features** Offers data extraction integration for Revenue Management Systems only. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Yield Interface Limited: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite, or • Oracle Hospitality OPERA 5 Room Reservations **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Yield Interface Basic Part Number: L102902	**Product Editions and Permitted Features** Offers simple integration to Revenue Management Systems with support for basic decisions only (BAR) returned to the PMS **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Yield Interface Basic: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Yield Interface Enhanced Part Number: L102901	**Product Editions and Permitted Features** Offers the most advanced integration to Revenue Management Systems with 2-way dataflow capabilities. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Yield Interface Enhanced: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite, or • Oracle Hospitality OPERA 5 Room Reservations **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Business Events Interface Part Number: L102909	**Product Editions and Permitted Features** Business Event Interface for a variety of external systems. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Business Events Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Gaming Interface Part Number: L102910	**Product Editions and Permitted Features** Offers intelligent connectivity between OPERA and the major casino Patron Tracking Systems. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Gaming Interface: • Oracle Hospitality OPERA 5 Property Premium, or • Oracle Hospitality OPERA 5 Property Standard, or • Oracle Hospitality OPERA 5 Property Lite **Entitled Products and Restricted Use Licenses** A license for the OPERA Gaming Interface also contains the subproduct Oracle Hospitality OPERA Comp Accounting. Entitlement of OPERA Comp Accounting is limited to the OPERA Gaming Interface and may not be used or deployed for other purposes. The OPERA Comp Accounting license must be purchased separately when used outside of the OPERA Gaming Interface.
Oracle Hospitality OPERA Hotel Property Services	Oracle Hospitality OPERA Property Premium Cloud Service Part Number: B81300	**Product Editions and Permitted Features** Supports full service hotels (which generally includes larger hotels, luxury hotels, resort hotels, and casino hotels) where guests expect a full spectrum of services and amenities. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Property Standard Cloud Service Part Number: B81301	**Product Editions and Permitted Features** Provides a scaled-down edition of the Premium version. Supports a feature set for hotels that need functionality beyond the base set provided in the Lite Property Management Services, but not all of the features and capabilities appropriate for a full service hotel. Extended stay and residence hotels would likely fall into this category. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Property Lite Cloud Service Part Number: B81302	**Product Editions and Permitted Features** Supports a base set of Property Service functionality appropriate for smaller properties or those offering limited services. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Sales and Catering Premium Cloud Service Part Number: B81323	**Product Editions and Permitted Features** Integrated with Oracle Hospitality Property Premium, Standard, or Lite, Oracle Hospitality OPERA Sales and Catering Premium provides a full range of Sales and Catering tools for managing sales, accounts and contacts, activities, group business, catering events, menus, and resources. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Sales and Catering Standard Cloud Service Part Number B81324	**Product Editions and Permitted Features** Integrated with Oracle Hospitality OPERA Property Management Premium, Standard, or Lite, Oracle Hospitality OPERA Sales and Catering Property Standard includes tools for managing accounts, contacts and activities, group business, events and function space inventory. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Sales and Catering Lite Cloud Service Part Number: B81326	**Product Editions and Permitted Features** Integrated with Oracle Hospitality OPERA Property Management Property Premium, Standard, or Lite, Oracle Hospitality OPERA Sales and Catering Lite provides basic sales tools for streamlining sales and managing accounts, contacts, and activities. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Venue Management Cloud Service Part Number: B86139	**Product Editions and Permitted Features** Oracle Hospitality OPERA Venue Management is a standalone Sales & Catering application which enables the managing sales, accounts and contacts, activities, catering events, menus, and resources. In addition the application also allows the access to cashiering and Accounts Receivable to manage invoicing for the venue. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A
Oracle Hospitality OPERA Hotel Central Services	Oracle Hospitality OPERA Room Reservations Cloud Service Part Number: B81303	**Product Editions and Permitted Features** Consists of those features and capabilities needed by a central reservation organization when creating and managing reservations for one or multiple properties. This includes tools for querying availability across properties, accessing profiles, making reservations, and composing stay itineraries. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Customer Loyalty Tracking Cloud Service Part Number: B81321	**Product Editions and Permitted Features** Tracks guest profile information along with membership bonus points, promotions, and award point consumption. Affiliations between guests and other designated groups are recorded to allow the guest to negotiate rates. Agents can be associated with a guest to specify commissions when a reservation is made. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Central Sales Cloud Service Part Number: B81317	**Product Editions and Permitted Features** Maximizes sales for the chain at large, regardless of where the business may materialize. Features include guestroom and function space availability across the entire enterprise, prospective business leads can be sent to selected chain properties based on customer preference and hotel features, and Frequent Individual Traveler (FIT) contracts are available for negotiating contracts and monitoring production. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A
Oracle Hospitality OPERA Hotel Add-Ons	Oracle Hospitality OPERA Mobile Cloud Service Part Number: B81304	**Product Editions and Permitted Features** Extends key front desk and housekeeping functionality to wireless devices like the iPad, Smartphone, and other touch devices. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Mobile Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

ORACLE®

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Multiproperty Cross Reservation Cloud Service Part Number: B81310	**Product Editions and Permitted Features** Provides the capability to enter and update reservations and view availability across multiple properties. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Multiproperty Cross Reservation Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Multiproperty Cross Postings Cloud Service Part Number: B81311	**Product Editions and Permitted Features** Provides the capability to post transactions across different properties. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Multiproperty Cross Postings Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Sales and Catering Multiproperty Group Room Control and Function Diary Cloud Service Part Number: B81325	**Product Editions and Permitted Features** Shares Group Room Control (GRC) and Function Diary. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Sales and Catering Multiproperty Group Room Control and Function Diary Cloud Service: • Oracle Hospitality OPERA Sales and Catering Premium Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Standard Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Advanced Reporting and Analytics Cloud Service Part Number: B81322	**Product Editions and Permitted Features** Provides hundreds of metrics to help with queries that show past, present, and future trends for a single property or across the enterprise. Data is globally consolidated from all applications in the database and displayed in an easy-to-understand visual representation to help decision-making. **Prerequisite Products** N/A **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Sales and Catering Reporting and Analytics Cloud Service Part Number: B81327	**Product Editions and Permitted Features** Provides ad hoc reporting for Oracle Hospitality OPERA 5 Sales and Catering with graphical representation and drill-down capabilities. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Sales and Catering Reporting and Analytics Cloud Service: • Oracle Hospitality OPERA Sales and Catering Premium Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Standard Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service, or • Oracle Hospitality OPERA Central Sales Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Web Self-Service Cloud Service Part Number: B81318	**Product Editions and Permitted Features** Includes a collection of web services that provide access to key functionality of Oracle Hospitality OPERA Property Management, such as Availability, Reservations, Profiles, and Membership handling. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Web Self-Service Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Premium Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Standard Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Lite Cloud Service, or • Oracle Hospitality OPERA Room Reservations Cloud Service, or • Oracle Hospitality OPERA Customer Loyalty Tracking Cloud Service, or • Oracle Hospitality OPERA Central Sales Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Sales and Catering Web Self-Service Cloud Service Part Number: B83674	**Product Editions and Permitted Features** Includes a collection of web services that allow access to function space availability and booking of function spaces. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Sales and Catering Web Self-Service Cloud Service: • Oracle Hospitality OPERA Sales and Catering Premium Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Standard Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service, or • Oracle Hospitality OPERA Central Sales Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Vacation Ownership System Cloud Service Part Number: B81312	**Product Editions and Permitted Features** Offers specialized features for mixed-use properties that handle both condo units and hotel rooms. It includes contract-driven reservation management, automatic inventory rotation, and on-demand and scheduled financial statements. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Vacation Ownership System Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Export Files Cloud Service Part Number: B81305	**Product Editions and Permitted Features** Accesses Export File Utility OPERA Membership Exports. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Export Files Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Back Office Cloud Service Part Number: B81328	**Product Editions and Permitted Features** Extracts financial and statistical data from the Oracle Hospitality Hotel Property Services to be imported into BOF Software. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Back Office Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA EFT Dynamic Currency Conversion Cloud Service Part Number: B81306	**Product Editions and Permitted Features** Allows properties to handle dual currency credit card collection from guests making settlement at the hotel. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA EFT Dynamic Currency Conversion Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Electronic Signature Capture Cloud Service for Orion Software Part Number: B81307	**Product Editions and Permitted Features** Captures an electronic signature for a registration card using a tablet PC, or similar device, and to create a secure encrypted file when active. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Electronic Signature Capture Cloud Service for Orion Software: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA ID Document Scanning Cloud Service Part Number: B81308	**Product Editions and Permitted Features** Scans an ID document such as a passport or driver's license and updates the various ID fields of the guest profile record through the interface. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA ID Document Scanning Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Electronic Commission Data Transfer Cloud Service Part Number: B81313	**Product Editions and Permitted Features** Includes file export functionality that is used within the Commission Handling module and allows file sending to a third party. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Electronic Commission Data Transfer Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Address Cleansing Vendor Integration Cloud Service Part Number: B85334	**Product Editions and Permitted Features** Provides the integration to third party Address Cleansing Services. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Address Cleansing Vendor Integration Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Premium Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Standard Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service, or • Oracle Hospitality OPERA Central Sales Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Virtual Room Numbers (Direct Inward Dialing) Cloud Service Part Number: B81330	**Product Editions and Permitted Features** Virtual Numbers allow the guest to be contacted from outside without having to go through the operator. The numbers are taken from a pool and are assigned to the guest or the room. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Virtual Room Numbers (Direct Inward Dialing) Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Comp Accounting Cloud Service Part Number: B81331	**Product Editions and Permitted Features** Includes Comp Routing, Authorizers, and Routing Limits. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Comp Accounting Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Property Management Kiosk Interface Cloud Service Part Number B81332	**Product Editions and Permitted Features** Accesses the Generic interface for guest-facing self-service such as check in, checkout, invoice preview. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Property Management Kiosk Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
Oracle Hospitality OPERA Hotel General Interfaces	Oracle Hospitality OPERA Business Events Interface Cloud Service Part Number: B81329 or B85501	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Business Events Interface Cloud Service are authorized to access the following modules and features: • One-way transmission of information through a Generic Business Event Interface, from OPERA to Third Party Systems. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Business Events Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Room Reservations Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Yield Interface Enhanced Cloud Service Part Number: B81335 or B85502	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Yield Interface Enhanced Cloud Service are authorized to access the following modules and features: • Customers can interface to major third party yield management systems to automatically provide yielded rates to the third party channel without manual entry. • The enhanced offer aligns to the third party yield management enhanced systems and supports a higher volume of messages being exchanged than the basic version. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Yield Interface Enhanced Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Premium Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Standard Cloud Service, or • Oracle Hospitality OPERA Room Reservations Cloud Service, or • Oracle Hospitality OPERA Central Sales Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Yield Interface Basic Cloud Service Part Number: B81336 or B85503	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Yield Interface Basic Cloud Service are authorized to access the following modules and features: • Customers can interface to major third party yield management systems to automatically provide yielded rates to the third party channel without manual entry. • The basic offer aligns to the third party yield management basic systems and supports a lower volume of messages being exchanged than the enhanced version. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Yield Interface Basic Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Premium Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Standard Cloud Service, or • Oracle Hospitality OPERA Room Reservations Cloud Service, or • Oracle Hospitality OPERA Central Sales Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Yield Interface Limited Cloud Service Part Number: B83675 or B85504	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Yield Interface Limited Cloud Service are authorized to access the following modules and features: • Interfacing to major third party yield management systems to gather information for yielding purposes from OPERA. • The limited offer aligns to the third party yield management limited offering and supports only one way communication (data extraction). **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Mobile Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Premium Cloud Service, or • Oracle Hospitality OPERA Sales and Catering Standard Cloud Service, or • Oracle Hospitality OPERA Room Reservations Cloud Service, or • Oracle Hospitality OPERA Central Sales Cloud Service **Entitled Products and Restricted Use Licenses** N/A

	Oracle Hospitality OPERA Exchange Interface One-Way Cloud Service Part Number: B81337 or B85505	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Exchange Interface One-Way Cloud Service are authorized to access the following modules and features:

Product Editions and Permitted Features

Users of the Oracle Hospitality OPERA Exchange Interface One-Way Cloud Service are authorized to access the following modules and features:

- One-way transmission of information through a Validated Interface from a Third Party System to OPERA using OXI.

The components of OXI are:

- A user front-end (Message Status) with Interface Setup
- Conversion code setup
- Interface Default settings
- Interface Parameters
- Profile Matching
- Automatic Transmission Scheduler for Inventory messages
- Resynchronization
- Various utilities

Current supported message types are:

- Profiles
- Profile lookup
- Reservations
- Blocks
- Rates
- Rate restrictions
- Inventory for out of order and overbooking
- Inventory total snapshot
- Export files from OPERA to external systems
- Stay data upload from OPERA

Prerequisite Products

A license to use the following products are a prerequisite to license and use OPERA Exchange Interface One-Way Cloud Service:

- Oracle Hospitality OPERA Property Premium Cloud Service, or
- Oracle Hospitality OPERA Property Standard Cloud Service, or
- Oracle Hospitality OPERA Property Lite Cloud Service, or
- Oracle Hospitality OPERA Sales and Catering Premium Cloud Service, or
- Oracle Hospitality OPERA Sales and Catering Standard Cloud Service, or
- Oracle Hospitality OPERA Sales and Catering Lite Cloud Service, or
- Oracle Hospitality OPERA Venue Management Cloud Service, or
- Oracle Hospitality OPERA Room Reservations Cloud Service, or

Hospitality Product	Subproduct	Licensing Information
		• Oracle Hospitality OPERA Customer Loyalty Tracking Cloud Service, or • Oracle Hospitality OPERA Central Sales Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Oracle
Hospitality
OPERA
Exchange
Interface Two-
Way Cloud
Service
Part Number:
B81338 or
B85506

Product Editions and Permitted Features
Users of the Oracle Hospitality OPERA
Exchange Interface Two-Way Cloud Service are
authorized to access the following modules and
features:

- Two-way transmission of information
  through a Validated Interface from a Third
  Party System to OPERA using OXI.

The components of OXI are:

- A user front-end (Message Status) with
  Interface Setup
- Conversion code setup
- Interface Default settings
- Interface Parameters
- Profile Matching
- Automatic Transmission Scheduler for
  Inventory messages
- Resynchronization
- Various utilities

Current supported message types are:

- Profiles
- Profile lookup
- Reservations
- Blocks
- Rates
- Rate restrictions
- Inventory for out of order and overbooking
- Inventory total snapshot
- Export files from OPERA to external
  systems
- Stay data upload from OPERA

Prerequisite Products
A license to use the following products are a
prerequisite to license and use OPERA
Exchange Interface Two-Way Cloud Service:

- Oracle Hospitality OPERA Property
  Premium Cloud Service, or
- Oracle Hospitality OPERA Property
  Standard Cloud Service, or
- Oracle Hospitality OPERA Property Lite
  Cloud Service, or
- Oracle Hospitality OPERA Sales and
  Catering Premium Cloud Service, or
- Oracle Hospitality OPERA Sales and
  Catering Standard Cloud Service, or
- Oracle Hospitality OPERA Sales and
  Catering Lite Cloud Service, or
- Oracle Hospitality OPERA Venue
  Management Cloud Service, or
- Oracle Hospitality OPERA Room
  Reservations Cloud Service, or

Hospitality Product	Subproduct	Licensing Information
		• Oracle Hospitality OPERA Customer Loyalty Tracking Cloud Service, or • Oracle Hospitality OPERA Central Sales Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA HTNG Interface Cloud Service Part Number: B81339 or B85507	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA HTNG Interface Cloud Service are authorized to access the following modules and features: • Information exchanged is (but not limited to): Profiles, Reservations, Posting Charges, Guest Messages, Housekeeping Status • Combines PMS Reservation/Profile and POS interface Functionality. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA HTNG Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
Oracle Hospitality OPERA Hotel Property Level Interfaces	Oracle Hospitality OPERA Gaming Interface Cloud Service Part Number: B81340 or B85508	**Product Editions and Permitted Features** Users of the Oracle Hospitality Gaming Interfaces Cloud Service are authorized to access the following modules and features: • Data exchange with PTS (Player Tracking Systems) in the casino and gaming market. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Gaming Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** A license for the OPERA Gaming Interface also contains the subproduct Oracle Hospitality OPERA Comp Accounting Cloud Service. Entitlement of OPERA Comp Accounting is limited to the OPERA Gaming Interface and may not be used or deployed for other purposes. The OPERA Comp Accounting license must be purchased separately when used outside of the OPERA Gaming Interface.

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Call Accounting System Interface Cloud Service Part Number: B83687 or B85510	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Call Accounting System Interface Cloud Service are authorized to access the following modules and features: • This Oracle Cloud Service is intended to be used for Windows, and allows you to manage OPERA IFC8 by monitoring a variety of Validated Interfaces and configuring how these external systems (Call Accounting Systems) interact with OPERA. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Call Accounting System Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Electronic Funds Transfer Interface Cloud Service Part Number: B83688 or B85511	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Electronic Funds Transfer Interface Cloud Service are authorized to access the following modules and features: • This Oracle Cloud Service is intended to be used for Windows, and allows you to manage OPERA IFC8 by monitoring a variety of Validated Interfaces and configuring how these external systems (Electronic Funds Transfer Systems) interact with OPERA. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Electronic Funds Transfer Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service, or • Oracle Hospitality OPERA Room Reservations Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Key Services System Interface Cloud Service Part Number: B83689 or B85512	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Key Services System Interface Cloud Service are authorized to access the following modules and features: • This Oracle Cloud Service is intended to be used for Windows, and allows you to manage OPERA IFC8 by monitoring a variety of Validated Interfaces and configuring how these external systems (Key Services Systems) interact with OPERA. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Key Services System Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Minibar System Interface Cloud Service Part Number: B83690 or B85513	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Minibar System Interface Cloud Service are authorized to access the following modules and features: • This Oracle Cloud Service is intended to be used for Windows, and allows you to manage OPERA IFC8 by monitoring a variety of Validated Interfaces and configuring how these external systems (Minibar Systems) interact with OPERA. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Minibar System Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Voice Mail System Interface Cloud Service Part Number: B83691 or B85514	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Voicemail System Interface Cloud Service are authorized to access the following modules and features: • This Oracle Cloud Service is intended to be used for Windows, and allows you to manage OPERA IFC8 by monitoring a variety of Validated Interfaces and configuring how these external systems (Voicemail Systems) interact with OPERA. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Voice Mail System Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Point of Sale System Interface Cloud Service Part Number: B83692 or B85515	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Point of Sale System Interface Cloud Service are authorized to access the following modules and features: • This Oracle Cloud Service is intended to be used for Windows, and allows you to manage OPERA IFC8 by monitoring a variety of Validated Interfaces and configuring how these external systems (Point of Sale Systems) interact with OPERA. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Point of Sale System Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service, or • Oracle Hospitality OPERA Venue Management Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Telephony Management System Interface Cloud Service Part Number: or B85516	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Telephony System Interface Cloud Service are authorized to access the following modules and features: • This Oracle Cloud Service is intended to be used for Windows, and allows you to manage OPERA IFC8 by monitoring a variety of Validated Interfaces and configuring how these external systems (Telephony Systems) interact with OPERA. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Telephony Management System Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Video Services Interface Cloud Service Part Number: B83694 or B85517	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Video Services Interface Cloud Service are authorized to access the following modules and features: • This Oracle Cloud Service is intended to be used for Windows, and allows you to manage OPERA IFC8 by monitoring a variety of Validated Interfaces and configuring how these external systems (Video Services Systems) interact with OPERA. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Video Services Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

ORACLE®

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Internet Posting System Interface Cloud Service Part Number: B83695 or B85518	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Internet Posting System Interface Cloud Service are authorized to access the following modules and features: • This Oracle Cloud Service is intended to be used for Windows, and allows you to manage OPERA IFC8 by monitoring a variety of Validated Interfaces and configuring how these external systems (Internet Posting Systems) interact with OPERA. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Internet Posting System Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Miscellaneous System Interface Cloud Service Part Number: B83696 or B85519	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Miscellaneous System Interface Cloud Service are authorized to access the following modules and features: • This Oracle Cloud Service is intended to be used for Windows, and allows you to manage OPERA IFC8 by monitoring a variety of Validated Interfaces and configuring how these external systems interact with OPERA. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Miscellaneous System Interface Cloud Service: • Oracle Hospitality OPERA Property Premium Cloud Service, or • Oracle Hospitality OPERA Property Standard Cloud Service, or • Oracle Hospitality OPERA Property Lite Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
Oracle Hospitality OPERA Hotel Central System Interfaces	Oracle Hospitality OPERA Reservation System ADS Interface Cloud Service Part Number: B81333 or B85520	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Reservation System ADS Interface Cloud Service are authorized to access the following modules and features: • XML-based interface between OPERA and 3rd party OTA's (Online Travel Agents) that allows data exchange for rates, availability, and ability to create / update reservations. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Reservation System ADS Interface Cloud Service: • Oracle Hospitality OPERA Room Reservations Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA Reservation System GDS Interface Cloud Service Part Number: B81334 or B85521	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Reservation System GDS Interface Cloud Service are authorized to access the following modules and features: • Interface that connects OPERA with the GDSs (Amadeus, Galileo, Sabre and Worldspan) and any ADS connecting via the Pegasus UltraSwitch product. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Reservation System GDS Interface Cloud Service: • Oracle Hospitality OPERA Room Reservations Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Reservation System GDS Interface Cloud Service Part Number: B81334 or B85521	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Reservation System GDS Interface Cloud Service are authorized to access the following modules and features: • Interface that connects OPERA with the GDSs (Amadeus, Galileo, Sabre and Worldspan) and any ADS connecting via the Pegasus UltraSwitch product. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA for RoomKey.com Online Travel Agency Interface Cloud Service: • Oracle Hospitality OPERA Room Reservations Cloud Service **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA for RoomKey.com Online Travel Agency Interface Cloud Service Part Number: B81320	**Product Editions and Permitted Features** Web service interface to retrieve hotel information, regional and general availability of rooms and rates. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA for RoomKey.com Online Travel Agency Interface Cloud Service: • Oracle Hospitality OPERA Room Reservations Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA Reservation System Exchange Interface Cloud Service Part Number: B85522	**Product Editions and Permitted Features** Users of the Oracle Hospitality OPERA Reservation System Exchange Interface Cloud Service are authorized to access the following modules and features: • One-way or Two-way transmission of information through a Validated Interface from a Third Party System to OPERA using OXI. The components of OXI are: • A user front-end (Message Status) with Interface Setup • Conversion code setup • Interface Default settings • Interface Parameters • Profile Matching • Automatic Transmission Scheduler for Inventory messages • Resynchronization • Various utilities Current supported message types are: • Profiles • Profile lookup • Reservations • Blocks • Rates • Rate restrictions • Inventory for out of order and overbooking, • Inventory total snapshot, • Export files from OPERA to external systems • Stay data upload from OPERA **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA Reservation System Exchange Interface Cloud Service: • Oracle Hospitality OPERA Room Reservations Cloud Service, or • Oracle Hospitality OPERA Customer Loyalty Tracking Cloud Service, or • Oracle Hospitality OPERA Central Sales Cloud Service **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
Oracle Hospitality OPERA 5 Hotel Property Systems	Oracle Hospitality OPERA 5 Property Premium Part Number: 5100-060	**Product Editions and Permitted Features** Supports full service hotels (which generally includes larger hotels, luxury hotels, resort hotels, and casino hotels) where guests expect a full spectrum of services and amenities. The OPERA 5 Property Premium license also provides access to appropriate OPERA internal interfaces and OPERA interfaces to Oracle Hospitality Point of Sale (POS). **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Premium: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Premium **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA 5 Property Standard Part Number: 5110-018	**Product Editions and Permitted Features** Provides a scaled-down edition of the Premium version. Supports a feature set for hotels that need functionality beyond the base set provided in the Lite Property Management Services, but not all of the features and capabilities appropriate for a full service hotel. Extended stay and residence hotels would likely fall into this category. Allows the maximum of 55 application functions to be active at one time. The OPERA 5 Property Standard license also provides access to appropriate OPERA internal interfaces and OPERA interfaces to Oracle Hospitality Point of Sale (POS). **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Standard: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Standard **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA 5 Property Lite Part Number: 5110-502	**Product Editions and Permitted Features** Supports a base set of Property Service functionality appropriate for smaller properties or those offering limited services. Allows a maximum of 30 application functions to be active at one time. The OPERA 5 Property Lite license also provides access to appropriate OPERA internal interfaces and OPERA interfaces to Oracle Hospitality Point of Sale (POS). **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Lite: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Lite **Entitled Products and Restricted Use Licenses** N/A
	Oracle Hospitality OPERA 5 Property Sales and Catering Premium Part Number: 5300-034	**Product Editions and Permitted Features** Integrated with Oracle Hospitality Property Premium, Standard, or Lite, Oracle Hospitality OPERA Property Management Property Sales and Catering Premium provides a full range of Sales and Catering tools for managing sales, accounts and contacts, activities, group business, catering events, menus, and resources. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Sales and Catering Premium: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Premium **Entitled Products and Restricted Use Licenses** N/A

Hospitality Product	Subproduct	Licensing Information
	Oracle Hospitality OPERA 5 Property Sales and Catering Standard Part Number: 5310-014	**Product Editions and Permitted Features** Integrated with Oracle Hospitality OPERA Property Management Premium, Standard, or Lite, Oracle Hospitality OPERA Property Management Property Sales and Catering Property Standard includes tools for managing accounts, contacts and activities, group business, events and function space inventory. **Prerequisite Products** A license to use the following products are a prerequisite to license and use OPERA 5 Property Sales and Catering Standard: • Oracle Hospitality Technology Foundation for Hotel Property Systems - OPERA 5 Standard **Entitled Products and Restricted Use Licenses** N/A

Third-Party Notices and/or Licenses

Open Source Software or Other Separately Licensed Software

Required notices for open source or other separately licensed software products or components distributed in OPERA Property Management are identified in the following table 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 open source software.

Provider	Component(s)	Licensing Information
Open Web Application Security Project (OWASP)	**CSRFGuard** Version 4.3.0	BSD 3-Clause License Copyright (c) 2011 Eric Sheridan 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.

Provider	Component(s)	Licensing Information
		3. Neither the name of OWASP 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. ==============LICENSE END=========== 4PL commons-io:commons-io LICENSE: Apache License Version 2.0 NOTICE: Apache Commons IO Copyright 2002-2023 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). --- 4PL org.apache.commons:commons-lang3 LICENSE: Apache License Version 2.0 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/). --- 4PL com.google.code.gson:gson LICENSE: Apache License Version 2.0 ---

Provider	Component(s)	Licensing Information
		4PL org.slf4j:slf4j-api LICENSE: Copyright (c) 2004-2007 QOS.ch 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. --
Prasad Khandekar	**Enhanced INI File Class for Java** Version Rev 8	Enhanced INI File Class for Java License
Hexidec Codex	**Hexidec Ekit** Version 1.7	You are receiving a copy of the Hexidec Ekit v. 1.7 or later in both source and object code. The terms of the Oracle license do NOT apply to the Hexidec Ekit v. 1.7 or later program; it is licensed under the following license, separately from the Oracle programs you receive. ©2000-2010 Howard Kistler/hexidec codex & contributors App/Applet for editing and saving HTML in a Java text component. Note – Name of Contributors are provided in the Copyright link provided in Public License field. GNU LESSER GENERAL PUBLIC LICENSE Version 2.1
Dan Adler	**JACOB (Java Com Bridge)** Version 1.19	GNU LESSER GENERAL PUBLIC LICENSE Version 2.1

Provider	Component(s)	Licensing Information
FasterXML, LLC	**Jackson Databind** Version 2.17.1	Jackson Databind ------------------Top-level license ----------- Apache License 2.0 ------------------- 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. ## Copyright Copyright 2007-, Tatu Saloranta (tatu.saloranta@iki.fi) ## 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. --------------(separator)--------------- == NAME OF DEPENDENCY 1 com.fasterxml.jackson.core:jackson-core == License Apache License 2.0 == 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. ## Copyright Copyright 2007-, Tatu Saloranta (tatu.saloranta@iki.fi) ## 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.

Provider	Component(s)	Licensing Information
		-------------------------------(separator)-----------------------------

== NAME OF DEPENDENCY 2
com.fasterxml.jackson.core:jackson-core

== License
Apache License Version 2.0

== 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.

Copyright
Copyright 2007-, Tatu Saloranta (tatu.saloranta@iki.fi)

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.

FastDoubleParser

jackson-core bundles a shaded copy of FastDoubleParser <https://github.com/wrandelshofer/FastDoubleParser>. That code is available under an MIT license <https://github.com/wrandelshofer/FastDoubleParser/blob/main/LICENSE> under the following copyright.

Copyright © 2023 Werner Randelshofer, Switzerland. MIT License.

See FastDoubleParser-NOTICE for details of other source code included in FastDoubleParser
and the licenses and copyrights that apply to that code.

----------------(separator)--------------------

== NAME OF DEPENDENCY 3
ch.randelshofer:fastdoubleparser

== License
MIT License |

Provider	Component(s)	Licensing Information
		Copyright (c) 2023 Werner Randelshofer, Switzerland. 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.
		== Copyright Notices # FastDoubleParser
		This is a Java port of Daniel Lemire's fast_float project. This project provides parsers for double, float, BigDecimal and BigInteger values.
		## Copyright
		Copyright © 2023 Werner Randelshofer, Switzerland. ## Licensing
		This code is licensed under MIT License. https://github.com/wrandelshofer/FastDoubleParser/blob/522be16e145f43308c43b23094e31d5efcaa580e/LICENSE (The file 'LICENSE' is included in the sources and classes Jar files that are released by this project - as is required by that license.)
		Some portions of the code have been derived from other projects. All these projects require that we include a copyright notice, and some require that we also include some text of their license file.
		fast_double_parser, Copyright (c) 2022 Daniel Lemire. BSL License. https://github.com/lemire/fast_double_parser https://github.com/lemire/fast_double_parser/blob/07d9189a8fb815fe800cb15ca022e7a07093236e/LICENSE.BSL
		(The file 'thirdparty-LICENSE' is included in the sources and classes Jar files that are released by this project - as is required by that license.)

Provider	Component(s)	Licensing Information
		fast_float, Copyright (c) 2021 The fast_float authors. MIT License. https://github.com/fastfloat/fast_float https://github.com/fastfloat/fast_float/blob/cc1e01e9eee74128e48d51488a6b1df4a767a810/LICENSE-MIT (The file 'thirdparty-LICENSE' is included in the sources and classes Jar files that are released by this project- as is required by that license.) bigint, Copyright 2020 Tim Buktu. 2-clause BSD License. https://github.com/tbuktu/bigint/tree/floatfft https://github.com/tbuktu/bigint/blob/617c8cd8a7c5e4fb4d919c6a4d11e2586107f029/LICENSE https://github.com/wrandelshofer/FastDoubleParser/blob/39e123b15b71f29a38a087d16a0bc620fc879aa6/bigint-LICENSE (We only use those portions of the bigint project that can be licensed under 2-clause BSD License.) (The file 'thirdparty-LICENSE' is included in the sources and classes Jar files that are released by this project - as is required by that license.) ----------------(separator)--------------------- == LICENSES Apache License 2.0
JCraft	**JSch** Version 0.1.55	http://www.jcraft.com/jsch/LICENSE.txt 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. 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 ``AS IS'' AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING,

Provider	Component(s)	Licensing Information
		BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL JCRAFT, INC. OR ANY CONTRIBUTORS TO THIS 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.
		Optional Compile dependency: === http://www.jcraft.com/jzlib/LICENSE.txt === 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. 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 ``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 JCRAFT, INC. OR ANY CONTRIBUTORS TO THIS 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

Provider	Component(s)	Licensing Information
		OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
Google Fonts / Lasse Fister	**Libre BarCode Font Project** Version 1.008	Copyright 2017-2019 The Libre Barcode Project Authors (https://github.com/graphicore/librebarcode)

This Font Software is licensed under the SIL Open Font License, Version 1.1.
This license is copied below, and is also available with a FAQ at:
https://scripts.sil.org/OFL

SIL OPEN FONT LICENSE Version 1.1 - 26 February 2007

PREAMBLE
The goals of the Open Font License (OFL) are to stimulate worldwide development of collaborative font projects, to support the font creation efforts of academic and linguistic communities, and to provide a free and open framework in which fonts may be shared and improved in partnership with others.

The OFL allows the licensed fonts to be used, studied, modified and redistributed freely as long as they are not sold by themselves. The fonts, including any derivative works, can be bundled, embedded, redistributed and/or sold with any software provided that any reserved names are not used by derivative works. The fonts and derivatives, however, cannot be released under any other type of license. The requirement for fonts to remain under this license does not apply to any document created using the fonts or their derivatives.

DEFINITIONS
"Font Software" refers to the set of files released by the Copyright Holder(s) under this license and clearly marked as such. This may include source files, build scripts and documentation.

"Reserved Font Name" refers to any names specified as such after the copyright statement(s).

"Original Version" refers to the collection of Font Software components as distributed by the Copyright Holder(s).

"Modified Version" refers to any derivative made by adding to, deleting, or substituting -- in part or in whole -- any of the components of the Original Version, by changing formats or by porting the Font Software to a new environment.

"Author" refers to any designer, engineer, programmer, technical writer or other person who contributed to the Font Software. |

Provider	Component(s)	Licensing Information
		PERMISSION & CONDITIONS Permission is hereby granted, free of charge, to any person obtaining a copy of the Font Software, to use, study, copy, merge, embed, modify, redistribute, and sell modified and unmodified copies of the Font Software, subject to the following conditions: 1) Neither the Font Software nor any of its individual components, in Original or Modified Versions, may be sold by itself. 2) Original or Modified Versions of the Font Software may be bundled, redistributed and/or sold with any software, provided that each copy contains the above copyright notice and this license. These can be included either as stand-alone text files, human-readable headers or in the appropriate machine-readable metadata fields within text or binary files as long as those fields can be easily viewed by the user. 3) No Modified Version of the Font Software may use the Reserved Font Name(s) unless explicit written permission is granted by the corresponding Copyright Holder. This restriction only applies to the primary font name as presented to the users. 4) The name(s) of the Copyright Holder(s) or the Author(s) of the Font Software shall not be used to promote, endorse or advertise any Modified Version, except to acknowledge the contribution(s) of the Copyright Holder(s) and the Author(s) or with their explicit written permission. 5) The Font Software, modified or unmodified, in part or in whole, must be distributed entirely under this license, and must not be distributed under any other license. The requirement for fonts to remain under this license does not apply to any document created using the Font Software. TERMINATION This license becomes null and void if any of the above conditions are not met. DISCLAIMER THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO

Provider	Component(s)	Licensing Information
		USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.
The Apache Software Foundation	**log4j-core** Version 2.20.0	Apache License 2.0 Notice: 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 Apache Log4j Copyright 1999-2023 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. -- Apache License 2.0 ---------- Notice.txt Log4j-api ------- Apache Log4j API Copyright 1999-2022 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/).
The Apache Software Foundation	**log4net** Version 2.0.15	Apache log4net Copyright 2004-2022 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (https://www.apache.org/). Apache License 2.0

Provider	Component(s)	Licensing Information
The Noto Project Authors	**NotoSans Font** Version 2.013	Copyright 2022 The Noto Project Authors (https://github.com/notofonts/latin-greek-cyrillic) This Font Software is licensed under the SIL Open Font License, Version 1.1. This license is copied below, and is also available with a FAQ at: https://scripts.sil.org/OFL --- SIL OPEN FONT LICENSE Version 1.1 - 26 February 2007 --- PREAMBLE The goals of the Open Font License (OFL) are to stimulate worldwide development of collaborative font projects, to support the font creation efforts of academic and linguistic communities, and to provide a free and open framework in which fonts may be shared and improved in partnership with others. The OFL allows the licensed fonts to be used, studied, modified and redistributed freely as long as they are not sold by themselves. The fonts, including any derivative works, can be bundled, embedded, redistributed and/or sold with any software provided that any reserved names are not used by derivative works. The fonts and derivatives, however, cannot be released under any other type of license. The requirement for fonts to remain under this license does not apply to any document created using the fonts or their derivatives. DEFINITIONS "Font Software" refers to the set of files released by the Copyright Holder(s) under this license and clearly marked as such. This may include source files, build scripts and documentation. "Reserved Font Name" refers to any names specified as such after the copyright statement(s). "Original Version" refers to the collection of Font Software components as distributed by the Copyright Holder(s). "Modified Version" refers to any derivative made by adding to, deleting, or substituting -- in part or in whole -- any of the components of the Original Version, by changing formats or by porting the Font Software to a new environment. "Author" refers to any designer, engineer, programmer, technical writer or other person who contributed to the Font Software. PERMISSION & CONDITIONS Permission is hereby granted, free of charge, to any person obtaining a copy of the Font Software, to use, study, copy, merge, embed, modify, redistribute, and sell

ORACLE

Provider	Component(s)	Licensing Information
		modified and unmodified copies of the Font Software, subject to the following conditions:
		1) Neither the Font Software nor any of its individual components, in Original or Modified Versions, may be sold by itself.
		2) Original or Modified Versions of the Font Software may be bundled, redistributed and/or sold with any software, provided that each copy contains the above copyright notice and this license. These can be included either as stand-alone text files, human-readable headers or in the appropriate machine-readable metadata fields within text or binary files as long as those fields can be easily viewed by the user.
		3) No Modified Version of the Font Software may use the Reserved Font Name(s) unless explicit written permission is granted by the corresponding Copyright Holder. This restriction only applies to the primary font name as presented to the users.
		4) The name(s) of the Copyright Holder(s) or the Author(s) of the Font Software shall not be used to promote, endorse or advertise any Modified Version, except to acknowledge the contribution(s) of the Copyright Holder(s) and the Author(s) or with their explicit written permission.
		5) The Font Software, modified or unmodified, in part or in whole, must be distributed entirely under this license, and must not be distributed under any other license. The requirement for fonts to remain under this license does not apply to any document created using the Font Software.
		TERMINATION
		This license becomes null and void if any of the above conditions are not met.
		DISCLAIMER THE FONT SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OF COPYRIGHT, PATENT, TRADEMARK, OR OTHER RIGHT. IN NO EVENT SHALL THE COPYRIGHT HOLDER BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, INCLUDING ANY GENERAL, SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF THE USE OR INABILITY TO USE THE FONT SOFTWARE OR FROM OTHER DEALINGS IN THE FONT SOFTWARE.

Provider	Component(s)	Licensing Information
Open Web Application Security Project (OWASP)	**OWASP Java Encoder Project** Version 1.2.3	Copyright (c) 2015 Jeff Ichnowski 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 OWASP 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.
Jonas Krogsboell	**PLJSON** Version 1.0.5	This software has been released under the MIT license: Copyright (c) 2009 Jonas Krogsboell and Lewis R Cunningham 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.

Provider	Component(s)	Licensing Information
		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 Apache Software Foundation	**struts-core** Version 2.5.33	Apache License 2.0 https://github.com/apache/struts/blob/STRUTS_2_5_33/core/src/main/resources/LICENSE.txt ======LICENSE END ========= ======NOTICE START ======== NOTICE: Apache Struts Copyright 2000-2011 The Apache Software Foundation This product includes software developed by The Apache Software Foundation (http://www.apache.org/). domTT (http://www.mojavelinux.com/projects/domtooltip/). The binary distributions include the following third party software: FreeMarker (http://freemarker.org/). OGNL (http://www.opensymphony.com/ognl/). XWork (http://www.opensymphony.com/xwork/). ===https://github.com/apache/struts/blob/STRUTS_2_5_33/core/src/main/resources/NOTICE.txt ========NOTICE END ======== 4PL org.freemarker:freemarker LICENSE: Apache License version 2.0 NOTICE: Apache FreeMarker Copyright 2015-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). ===https://github.com/apache/freemarker/blob/v2.3.31/NOTICE --- 4PL ognl:ognl LICENSE: ====LICENSE START ==== /* =====================================

Provider	Component(s)	Licensing Information
		The OpenSymphony Software License, Version 1.1 (this license is derived and fully compatible with the Apache Software License - see http://www.apache.org/LICENSE.txt)
		Copyright (c) 2001-2004 The OpenSymphony Group. 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 OpenSymphony Group (http://www.opensymphony.com/)." Alternately, this acknowledgment may appear in the software itself, if and wherever such third-party acknowledgments normally appear.
		4. The names "OpenSymphony" and "The OpenSymphony Group" must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact license@opensymphony.com .
		5. Products derived from this software may not be called "OpenSymphony" or "OGNL", nor may "OpenSymphony" or "OGNL" appear in their name, without prior written permission of the OpenSymphony Group.
		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.

Provider	Component(s)	Licensing Information
		* ================================= */ 5PL org.javassist:javassist LICENSE: =========LICENSE START======= Mozilla Public License Version 1.1 --- 4PL org.apache.logging.log4j:log4j-api LICENSE: Apache License Version 2.0 NOTICE: Apache Log4j Copyright 1999-2023 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. --- 4PL commons-fileupload:commons-fileupload LICENSE: Apache License Version 2.0 NOTICE: Apache Commons FileUpload Copyright 2002-2023 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). --- 4PL commons-io:commons-io LICENSE: Apache License Version 2.0 NOTICE: Apache Commons IO Copyright 2002-2023 The Apache Software Foundation This product includes software developed at

Provider	Component(s)	Licensing Information
		The Apache Software Foundation (https://www.apache.org/). -- 4PL org.apache.commons:commons-lang3 LICENSE: Apache License Version 2.0 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/). -- 4PL org.apache.commons:commons-logging LICENSE: Apache License Version 2.0 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/). --
ZXing Project	**ZXing** Version 3.4.0	Copyright (C) 2010-2019 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. Apache License 2.0

3
Licenses

Apache License Version 2.0

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 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 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 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 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

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.

===

Sub component : spring-orm

License : Apache 2.0

/*

Copyright 2002-2023 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.

 */

_____

Fourth party dependency

spring-beans

Spring-core

spring-jcl

spring-tx

spring-jdbc

License : Apache 2.0

/*

Copyright 2002-2023 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.

 */

Bootstrap v3.3.7

License: MIT license (https://github.com/twbs/bootstrap/blob/master/LICENSE)

Project: http://getbootstrap.com

Copyright: 2011-2016 Twitter, Inc

CDI API Version 1.1

 License: Apache License, 2.0

 Project: http://www.seamframework.org/Weld

 Copyright 2010, Red Hat, Inc., and individual contributors by the @authors tag.

Google Guava Version 18.0

   License: Apache License, 2.0

   Copyright (C) 2009 The Guava Authors

---

javax.inject Version: 1

   License: Apache License, 2.0

   Copyright (C) 2009 The JSR-330 Expert Group

Javassist Version 3.22.0-CR2, 3.25.0-GA

   License: Apache License, 2.0

   Project: http://www.javassist.org/

   Copyright (C) 1999- Shigeru Chiba. All Rights Reserved.

--

Jackson JAX-RS Providers Version 2.8.10

License: Apache License, 2.0

Project: https://github.com/FasterXML/jackson-jaxrs-providers

Copyright: (c) 2009-2011 FasterXML, LLC. All rights reserved unless otherwise indicated.

---

jQuery v1.12.4

   License: jquery.org/license (MIT)

   Project: jquery.org

   Copyright: (c) jQuery Foundation

---

jQuery Barcode plugin 0.3

License: MIT & GPL (http://www.opensource.org/licenses/mit-license.php & http://www.gnu.org/licenses/gpl.html)

Project: http://www.pasella.it/projects/jQuery/barcode

Copyright: (c) 2009 Antonello Pasella antonello.pasella@gmail.com

COPYRIGHT NOTICE

=============

Apache Commons Codec

Copyright 2002-2019 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 test data from http://aspell.net/test/orig/batch0.tab.

Copyright © 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 © 2008 Alexander Beider & Stephen P. Morse.

DEPENDENCIES:

----

cglib (Apache License 2.0)

Copyright 2005 The Apache Software Foundation

This product includes software developed by The Apache Software Foundation (http://www.apache.org/).

Apache Ant (Apache License 2.0)

Copyright 1999-2018 The Apache Software Foundation

This product includes software developed at The Apache Software Foundation (http://www.apache.org/).

The task is based on code Copyright © 2002, Landmark Graphics Corp that has been kindly donated to the Apache Software Foundation.

ASM (The 3-Clause BSD License)

Copyright © 2000-2011 INRIA, France Telecom. All rights reserved.

The 3-Clause BSD License

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 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 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, 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 project includes Public Suffix List copied from licensed under the terms of the

Mozilla Public License, v. 2.0

Full license text:

Apache HttpComponents Core

Copyright 2005-2019 The Apache Software Foundation

This product includes software developed at

The Apache Software Foundation (http://www.apache.org/).

--- license term of 4-th dependency #1 - httpcore 4.4.11 ---

LICENSE: Apache 2.0 https://github.com/apache/httpcomponents-core/blob/4.4.11/LICENSE.txt

--- copyright notice of 4-th dependency #2 - commons-logging 1.2 ---

Apache Commons Logging

Copyright 2003-2014 The Apache Software Foundation

This product includes software developed at The Apache Software Foundation (http://www.apache.org/).

--- license term of 4-th dependency #2 - commons-logging 1.2 ---

LICENSE: Apache 2.0 https://github.com/apache/commons-logging/blob/LOGGING_1_2/LICENSE.txt

--- copyright term 4-th dependency #3 - commons-codec 1.12 ---

Apache Commons Codec

Copyright 2002-2017 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 test data from http://aspell.net/test/orig/batch0.tab.

Copyright © 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 © 2008 Alexander Beider & Stephen P. Morse.

--- copyright term 4-th dependency #3 - commons-codec 1.12 ---

LICENSE: Apache 2.0 https://github.com/apache/commons-codec/blob/commons-codec-1.12/LICENSE.txt

Apache log4j

Copyright 2010 The Apache Software Foundation

This product includes software developed at

The Apache Software Foundation (http://www.apache.org/)

4th party dependencies

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 License.

----

org.apache.logging.log4j » log4j-api-java9

Copyright Version 2.0, January 2004

Licensed under the Apache License, Version 2.0 (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: org.springframework:spring-beans

LICENSE: Apache 2.0

NOTICE and COPYRIGHT:

Copyright (c) 2002-2023 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 DEPENDENCY: org.springframework:spring-core

LICENSE: Apache 2.0

NOTICE and COPYRIGHT:

Copyright (c) 2002-2023 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 DEPENDENCY: org.springframework:spring-jcl

LICENSE: Apache 2.0

NOTICE and COPYRIGHT:

Copyright (c) 2002-2023 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.

==

Sub component : spring-web

License : Apache 2.0

/*

 Copyright 2002-2023 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.

 */

_____

Fourth party dependency

spring-beans

Spring-core

spring-jcl

License : Apache 2.0

/*

Copyright 2002-2023 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.

 */

==

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):

>>> org.ow2.asm:asm, org.ow2.asm:asm-commons:

Copyright © 2000-2011 INRIA, France Telecom

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.

Copyright © 1999-2009, OW2 Consortium <https://www.ow2.org/>

>>> cglib:cglib:

CGLIB is licensed under the Apache License, version 2.0, the text of which is included above.

>>> org.objenesis:objenesis:

Per the LICENSE file in the Objenesis ZIP distribution downloaded from http://objenesis.org/download.html, Objenesis 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 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.

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.

===

Recursive fourth party dependency:

==

1. org.springframework » spring-beans

A) org.springframework » spring-core

a) org.springframework » spring-jcl

============================separator==================

2. org.springframework » spring-core

A) org.springframework » spring-jcl

==========================END===========================

License: Apache 2.0 License

==

cglib:cglib

This product includes software developed by

The Apache Software Foundation (http://www.apache.org/).

License: Apache 2.0 License

==

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.

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.

==

org.objenesis:objenesis

License: Apache 2.0 License

==

io.projectreactor.tools:blockhound

License: Apache 2.0 License

==

Enhanced INI File Class for Java

The Code Project Open License (CPOL) 1.0

The Code Project Open License (CPOL) is intended to provide developers who choose to share their code with a license that protects them and provides users of their code with a clear statement regarding how the code can be used.

The CPOL is our gift to the community. We encourage everyone to use this license if they wish regardless of whether the code is posted on CodeProject.com.

Preamble

This License governs Your use of the Work. This License is intended to allow developers to use the Source Code and Executable Files provided as part of the Work in any application in any form.

The main points subject to the terms of the License are:

Source Code and Executable Files can be used in commercial applications;

Source Code and Executable Files can be redistributed; and

Source Code can be modified to create derivative works.

No claim of suitability, guarantee, or any warranty whatsoever is provided. The software is provided "as-is".

The Article(s) accompanying the Work may not be distributed or republished without the Author's consent

This License is entered between You, the individual or other entity reading or otherwise making use of the Work licensed pursuant to this License and the individual or other entity which offers the Work under the terms of this License ("Author").

License

THE WORK (AS DEFINED BELOW) IS PROVIDED UNDER THE TERMS OF THIS CODE PROJECT OPEN LICENSE ("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 HEREIN, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. THE AUTHOR GRANTS YOU THE RIGHTS CONTAINED HEREIN IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS. IF YOU DO NOT AGREE TO ACCEPT AND BE BOUND BY THE TERMS OF THIS LICENSE, YOU CANNOT MAKE ANY USE OF THE WORK.

Definitions.

"Articles" means, collectively, all articles written by Author which describes how the Source Code and Executable Files for the Work may be used by a user.

"Author" means the individual or entity that offers the Work under the terms of this License.

"Derivative Work" means a work based upon the Work or upon the Work and other pre-existing works.

"Executable Files" refer to the executables, binary files, configuration and any required data files included in the Work.

"Publisher" means the provider of the website, magazine, CD-ROM, DVD or other medium from or by which the Work is obtained by You.

"Source Code" refers to the collection of source code and configuration files used to create the Executable Files.

"Standard Version" refers to such a Work if it has not been modified, or has been modified in accordance with the consent of the Author, such consent being in the full discretion of the Author.

"Work" refers to the collection of files distributed by the Publisher, including the Source Code, Executable Files, binaries, data files, documentation, whitepapers and the Articles.

"You" is you, an individual or entity wishing to use the Work and exercise your rights under this License.

Fair Use/Fair Use Rights. Nothing in this License is intended to reduce, limit, or restrict any rights arising from fair use, fair dealing, first sale or other limitations on the exclusive rights of the copyright owner under copyright law or other applicable laws.

License Grant. Subject to the terms and conditions of this License, the Author 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:

You may use the standard version of the Source Code or Executable Files in Your own applications.

You may apply bug fixes, portability fixes and other modifications obtained from the Public Domain or from the Author. A Work modified in such a way shall still be considered the standard version and will be subject to this License.

You may otherwise modify Your copy of this Work (excluding the Articles) in any way to create a Derivative Work, provided that You insert a prominent notice in each changed file stating how, when and where You changed that file.

You may distribute the standard version of the Executable Files and Source Code or Derivative Work in aggregate with other (possibly commercial) programs as part of a larger (possibly commercial) software distribution.

The Articles discussing the Work published in any form by the author may not be distributed or republished without the Author's consent. The author retains copyright to any such Articles. You may use the Executable Files and Source Code pursuant to this License but you may not repost or republish or otherwise distribute or make available the Articles, without the prior written consent of the Author.

Any subroutines or modules supplied by You and linked into the Source Code or Executable Files of this Work shall not be considered part of this Work and will not be subject to the terms of this License.

Patent License. Subject to the terms and conditions of this License, each Author 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, import, and otherwise transfer the Work.

Restrictions. The license granted in Section 3 above is expressly made subject to and limited by the following restrictions:

You agree not to remove any of the original copyright, patent, trademark, and attribution notices and associated disclaimers that may appear in the Source Code or Executable Files.

You agree not to advertise or in any way imply that this Work is a product of Your own. The name of the Author may not be used to endorse or promote products derived from the Work without the prior written consent of the Author.

You agree not to sell, lease, or rent any part of the Work. This does not restrict you from including the Work or any part of the Work inside a larger software distribution that itself is being sold. The Work by itself, though, cannot be sold, leased or rented.

You may distribute the Executable Files and Source Code 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 of the Executable Files or Source Code You distribute and ensure that anyone receiving such Executable Files and Source Code agrees that the terms of this License apply to such Executable Files and/or Source Code. 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 the Executable Files or Source Code with any technological measures that control access or use of the Work in a manner inconsistent with the terms of this License.

You agree not to use the Work for illegal, immoral or improper purposes, or on pages containing illegal, immoral or improper material. The Work is subject to applicable export

laws. You agree to comply with all such laws and regulations that may apply to the Work after Your receipt of the Work.

Representations, Warranties and Disclaimer. THIS WORK IS PROVIDED "AS IS", "WHERE IS" AND "AS AVAILABLE", WITHOUT ANY EXPRESS OR IMPLIED WARRANTIES OR CONDITIONS OR GUARANTEES. YOU, THE USER, ASSUME ALL RISK IN ITS USE, INCLUDING COPYRIGHT INFRINGEMENT, PATENT INFRINGEMENT, SUITABILITY, ETC. AUTHOR EXPRESSLY DISCLAIMS ALL EXPRESS, IMPLIED OR STATUTORY WARRANTIES OR CONDITIONS, INCLUDING WITHOUT LIMITATION, WARRANTIES OR CONDITIONS OF MERCHANTABILITY, MERCHANTABLE QUALITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OF TITLE OR NON-INFRINGEMENT, OR THAT THE WORK (OR ANY PORTION THEREOF) IS CORRECT, USEFUL, BUG-FREE OR FREE OF VIRUSES. YOU MUST PASS THIS DISCLAIMER ON WHENEVER YOU DISTRIBUTE THE WORK OR DERIVATIVE WORKS.

Indemnity. You agree to defend, indemnify and hold harmless the Author and the Publisher from and against any claims, suits, losses, damages, liabilities, costs, and expenses (including reasonable legal or attorneys' fees) resulting from or relating to any use of the Work by You.

Limitation on Liability. EXCEPT TO THE EXTENT REQUIRED BY APPLICABLE LAW, IN NO EVENT WILL THE AUTHOR OR THE PUBLISHER 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 OR OTHERWISE, EVEN IF THE AUTHOR OR THE PUBLISHER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Termination.

This License and the rights granted hereunder will terminate automatically upon any breach by You of any term of this License. Individuals or entities who have received Derivative 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, 6, 7, 8, 9, 10 and 11 will survive any termination of this License.

If You bring a copyright, trademark, patent or any other infringement claim against any contributor over infringements You claim are made by the Work, your License from such contributor to the Work ends automatically.

Subject to the above terms and conditions, this License is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, the Author 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.   Publisher. The parties hereby confirm that the Publisher shall not, under any circumstances, be responsible for and shall not have any liability in respect of the subject matter of this

License. The Publisher makes no warranty whatsoever in connection with the Work and shall 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. The Publisher reserves the right to cease making the Work available to You at any time without notice.

Miscellaneous

This License shall be governed by the laws of the location of the head office of the Author or if the Author is an individual, the laws of location of the principal place of residence of the Author.

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 License, 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 herein. There are no understandings, agreements or representations with respect to the Work not specified herein. The Author 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 Author and You.

GNU General Public License (GPL) Version 2.1

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.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

O. 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.

3. 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.

4. 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.

5. 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.

6. 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.

7. 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.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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 MERCHANT ABILITY 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 LOSSOF 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.

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., 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.

, 1 April 1990

Ty Coon, President of Vice

That's all there is to it!

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 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 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 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 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 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. 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 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") alleging that:

(a) such Participant's Contributor Version directly or indirectly infringes any patent, then any and all rights granted by such Participant to You under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively, unless if within 60 days after receipt of notice You either: (i) agree in writing to pay Participant a mutually agreeable reasonable royalty for Your past and future use of Modifications made by such Participant, or (ii) withdraw Your litigation claim with respect to the Contributor Version against such Participant. If within 60 days of notice, a reasonable royalty and payment arrangement are not mutually agreed upon in writing by the parties or the litigation claim is not withdrawn, the rights granted by Participant to You under Sections 2.1 and/or 2.2 automatically terminate at the expiration of the 60 day notice period specified above.

(b) any software, hardware, or device, other than such Participant's Contributor Version, directly or indirectly infringes any patent, then any rights granted to You by such Participant under Sections 2.1(b) and 2.2(b) are revoked effective as of the date You first made, used, sold, distributed, or had made, Modifications made by that Participant.

8.3. If You assert a patent infringement claim against Participant alleging that such Participant's Contributor Version 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.

8.4. In the event of termination under Sections 8.1 or 8.2 above, all end user license agreements (excluding distributors and resellers) which have been validly granted by You or any distributor hereunder prior to termination shall survive termination.

9. 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 CODE, 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 CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION AND LIMITATION MAY NOT APPLY TO YOU.

10. U.S. GOVERNMENT END USERS.

The Covered Code is a "commercial item," as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of "commercial computer software" 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 Code with only those rights set forth herein.

11. 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 California law provisions (except to the extent applicable law, if any, provides otherwise), excluding its conflict-of-law provisions. With respect to disputes in which at least one party is a citizen of, or an entity chartered or registered to do business in the United States of America, any litigation relating to this License shall be subject to the jurisdiction of the Federal Courts of the Northern District of California, with venue lying in Santa Clara County, California, 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.

12. 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.

13. MULTIPLE-LICENSED CODE.

Initial Developer may designate portions of the Covered Code as "Multiple-Licensed". "Multiple-Licensed" means that the Initial Developer permits you to utilize portions of the Covered Code under Your choice of the MPL or the alternative licenses, if any, specified by the Initial Developer in the file described in Exhibit A.

EXHIBIT A -Mozilla Public License.

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. You may obtain a copy of the License at

http://www.mozilla.org/MPL/

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.

The Original Code is Javassist.

The Initial Developer of the Original Code is Shigeru Chiba. Portions created by the Initial Developer are

Copyright (C) 1999- Shigeru Chiba. All Rights Reserved.

Contributor(s): __Bill Burke, Jason T. Greene_____.

Alternatively, the contents of this software may be used under the terms of the GNU Lesser General Public License Version 2.1 or later (the "LGPL"), or the Apache License Version 2.0 (the "AL"), in which case the provisions of the LGPL or the AL are applicable instead of those above. If you wish to allow use of your version of this software only under the terms of either the LGPL or the AL, and not to allow others to use your version of this software under the terms of the MPL, indicate your decision by deleting the provisions above and replace them with the notice and other provisions required by the LGPL or the AL. If you do not delete the provisions above, a recipient may use your version of this software under the terms of any one of the MPL, the LGPL or the AL.

If you obtain this software as part of JBoss, the contents of this software may be used under only the terms of the LGPL. To use them under the MPL, you must obtain a separate package including only Javassist but not the other part of JBoss.

All the contributors to the original source tree have agreed to the original license term described above.

--------------------------Separator--------------------------------------

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.

 */