

Oracle® Database Appliance

Licensing Information User Manual



Release 19.12

F44652-01

September 2021

ORACLE®

Copyright © 2000, 2021, Oracle and/or its affiliates.

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

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

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

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

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

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

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

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

Contents

Preface

Audience	v
Documentation Accessibility	v
Related Documents	v
Conventions	vi

1 Introduction

2 Oracle Database Appliance Licensing Overview

About Licensing	2-1
CPUs and Core Count	2-2

3 Capacity-On-Demand Licensing Information

Oracle Database Appliance Capacity-on-Demand Licensing	3-1
Capacity-On-Demand Licensing for Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA	3-2
Capacity-On-Demand Licensing for Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA	3-3
Capacity-On-Demand Licensing for Oracle Database Appliance X6-2-HA	3-4
Capacity-On-Demand Licensing for Oracle Database Appliance X6-2M and X6-2L	3-5
Capacity-On-Demand Licensing for Oracle Database Appliance X6-2S	3-5
Capacity-On-Demand Licensing for Oracle Database Appliance X5-2	3-6

4 Third-Party Product Licenses for This Release

Oracle Database Licensing Information	4-1
Other Third-Party Product Licenses	4-1

5 Third-Party Product Licenses for Earlier Releases of Oracle Database Appliance

Third-Party Product Licenses for Releases 12.2.1.3 and 12.2.1.4	5-1
Third-Party Product Licenses for Release 12.2.1.2	5-9
Third-Party Product Licenses for Release 12.2.1.1 and Earlier	5-16

A Open Source Software License Text

The Apache Software License, Version 2.0	A-1
GNU Lesser General Public License, Version 2.1	A-4
Eclipse Public License - v 1.0	A-11
Python Software License	A-14
COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1	A-15

Preface

This document, which is part of the Program Documentation under the terms of your Oracle licensing agreement, is intended to help you understand the features, functionality, and options available for Oracle Programs.

If you have a question about your licensing needs, then contact your Oracle sales representative or the License Management Services representative at <http://www.oracle.com/us/corporate/license-management-services/index.html>. You can also refer to the resources listed in “Related Documents” for more information.

- [Audience](#)
- [Documentation Accessibility](#)
- [Related Documents](#)
- [Conventions](#)

Audience

This book is intended for all purchasers of Oracle Database Appliance.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Related Documents

For more information about Oracle Database Appliance, go to <http://www.oracle.com/goto/oda/docs> and click the appropriate release. The following documents are published in the Oracle Database Appliance online documentation library:

- *Oracle Database Appliance Release Notes*
- *Oracle Database Appliance Licensing Information User Manual*
- *Oracle Database Appliance Security Guide*
- *Oracle Database Appliance Accessibility Guide*
- *Oracle Database Appliance X8-2 Deployment and User's Guide*

- *Oracle Database Appliance X7-2 Deployment and User's Guide*
- *Oracle Database Appliance X6-2-HA Deployment and User's Guide*
- *Oracle Database Appliance X6-2S/M/L Deployment and User's Guide*
- *Oracle Database Appliance X5-2/X4-2 Deployment and User's Guide*
- Oracle Database Appliance Setup Posters and Booklets (a full-size printed copy ships with Oracle Database Appliance)
- *Oracle Database Appliance Owner's Guide*
- *Oracle Database Appliance Service Manual*
- *Oracle Database Appliance Series Safety and Compliance Guide*

For more information about using Oracle Database, go to <http://docs.oracle.com/en/database/> and select the database release from the menu. See the following documents in the Oracle Database online documentation library:

- *Oracle Database Security Guide*
- *Oracle Database Administrator's Guide*
- *Oracle Database SQL Language Quick Reference*
- *Oracle Database Backup and Recovery User's Guide*
- *Oracle Database Backup and Recovery Reference*
- *Oracle Database Utilities*
- *Oracle Automatic Storage Management Administrator's Guide*

For more information about Oracle Integrated Lights Out Manager 3.2, see https://docs.oracle.com/cd/E37444_01/.

For more details about other Oracle products that are mentioned in Oracle Database Appliance documentation, see the Oracle Documentation home page at <http://docs.oracle.com>.

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

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

Oracle Database Appliance Licensing Overview

This chapter provides an overview of the licensing process for each hardware platform.

Topics:

- [About Licensing](#)
Oracle Database Appliance provides capacity-on-demand licensing.
- [CPUs and Core Count](#)
Review this section for information about core license options for your Oracle Database Appliance hardware.

About Licensing

Oracle Database Appliance provides capacity-on-demand licensing.

Capacity-on-demand (CoD) refers to an Oracle Database Appliance server that has a subset of its cores turned off so that the Oracle Database Enterprise Edition software license cost can be reduced. The number of cores can be reduced before or after the deployment. The number of active cores can be increased at a later time, when more capacity is needed. Oracle Database is licensed separately. Refer to *Database Licensing Information User Manual* for additional information.

When you add your hardware Support Identifier (SI) for Oracle Database Appliance to your My Oracle Support account, you establish a license for all the cores on your system. Oracle Database Appliance Models X8-2-HA, X7-2-HA, X6-2-HA, X5-2, and X4-2 can be deployed as a bare metal or virtualization platform. Both platform types offer capacity-on-demand licensing.

With bare-metal installations, you disable cores that you do not intend Oracle Database to use:

- For Oracle Database Appliance X8-2S, X8-2M, X8-2-HA, X7-2S, X7-2M, X7-2-HA, X6-2-HA, X6-2S, X6-2M, and X6-2L: Issue the command `odacli update-cpucore` to set the low water mark and to increase the cores.
- For Oracle Database Appliance X5-2 and X4-2: Add your hardware Support Identifier (SI) for Oracle Database Appliance to your My Oracle Support account and create a key.

If you deploy Oracle Database Appliance Virtualized Platform, then all the cores are enabled. However, capacity-on-demand licensing is established by assigning specific cores to the virtual machine where you run Oracle Database and related software (ODA_BASE).

Chapter two explains how to obtain a licensing key and record your initial license requirements with My Oracle Support. It also explains how to change the licensed core count, if necessary, later. Chapter two is only appropriate for bare metal installations where your license covers the cores that you are using for Oracle Database.

Chapter three contains information about the third-party products that are included with Oracle Database Appliance.

CPUs and Core Count

Review this section for information about core license options for your Oracle Database Appliance hardware.

- Oracle Database Appliance X8-2-HA has 2 servers, each with 2 CPUs of 16 cores each. When you deploy Oracle Database Appliance X8-2-HA, all 64 cores (32 cores in each server) are active with hyper-threading enabled by default.
- Oracle Database Appliance X8-2M contains 2 CPUs with 16 cores for a total of 32 cores. When you deploy Oracle Database Appliance X8-2M, all 32 cores are active with hyper-threading enabled by default.
- Oracle Database Appliance X8-2S contains 1 CPU with 16 cores. When you deploy Oracle Database Appliance X8-2S, all 16 cores are active with hyper-threading enabled by default.
- Oracle Database Appliance X7-2-HA has 2 servers, each with 2 CPUs of 18 cores each. When you deploy Oracle Database Appliance X7-2-HA, all 72 cores (36 cores in each server) are active with hyper-threading enabled by default.
- Oracle Database Appliance X7-2M contains 2 CPUs with 18 cores for a total of 36 cores. When you deploy Oracle Database Appliance X7-2M, all 36 cores are active with hyper-threading enabled by default.
- Oracle Database Appliance X7-2S contains 1 CPU with 10 cores. When you deploy Oracle Database Appliance X7-2S, all 10 cores are active with hyper-threading enabled by default.
- Oracle Database Appliance X6-2-HA contains 2 CPU with 10 cores. When you deploy Oracle Database Appliance X6-2-HA, all 40 cores (20 cores in each server) are active with hyper-threading enabled by default.
- Oracle Database Appliance X6-2M and X6-2L each contain 2 CPU with 10 cores. When you deploy Oracle Database Appliance X6-2M or X6-2L, all 20 cores are active with hyper-threading enabled by default.
- Oracle Database Appliance X6-2S contains 1 CPU with 10 cores. When you deploy Oracle Database Appliance X6-2S, all 10 cores are active with hyper-threading enabled by default.
- Oracle Database Appliance X5-2 nodes each contain 2 CPUs and each CPU has 18 cores. When you deploy Oracle Database Appliance X5-2, all 72 cores (36 cores in each server) are active with hyper-threading enabled by default.
- Oracle Database Appliance X4-2 nodes each contain 2 CPUs and each CPU has 12 cores. When you deploy Oracle Database Appliance X4-2, all 48 cores (24 cores in each server) are active with hyper-threading enabled by default.

Oracle Database Appliance bare metal licensing is determined by the number of enabled cores that you have on your system. The capacity-on-demand licensing feature enables you to change the enabled core count as your system resource needs change.

Initialize the number of licensed cores to the level currently required by your applications. Each server node has the same number of active cores. Later, increase the licensed core count as your applications require more capacity. Change the number of licensed cores by obtaining and applying a core key to configure your appliance, using the tables for your Oracle Database Appliance platform.

Oracle Database Appliance X8-2-HA Licensed Core Licensing Options

The table provides an example of how the licensed cores for each node of an Oracle Database Appliance X8-2-HA relate to active cores for Oracle RAC and Oracle Enterprise Edition and active cores for Oracle RAC One Node.

Table 2-1 Example of Bare Metal License Options for Oracle Database Appliance X8-2-HA Systems

Licensed Cores for Each Node (X8-2-HA Only)	Active Cores for Oracle RAC and Oracle Enterprise Edition (X8-2-HA Only)	Active Cores for Oracle RAC One Node (X8-2-HA Only)
2	4	2
4	8	4
6	12	6
8	16	8
10	20	10
12	24	12
14	28	14
16	32	16
18	36	18
20	40	20
22	44	22
24	48	24
26	52	26
28	56	28
30	60	30
32	64	32

Oracle Database Appliance X8-2M and X8-2S Licensed Core Licensing Options**Table 2-2 Bare Metal License Options for all Oracle Database Appliance X8-2M and X8-2S Systems**

Licensed Cores for Single Node (X8-2S)	Licensed Cores for Single Node (X8-2M)
2	2
4	4
6	6
8	8
10	10
12	12
14	14
16	16
Not applicable	18

Table 2-2 (Cont.) Bare Metal License Options for all Oracle Database Appliance X8-2M and X8-2S Systems

Licensed Cores for Single Node (X8-2S)	Licensed Cores for Single Node (X8-2M)
Not applicable	20
Not applicable	22
Not applicable	24
Not applicable	26
Not applicable	28
Not applicable	30
Not applicable	32

Oracle Database Appliance X7-2-HA Licensed Core Licensing Options

The table provides an example of how the licensed cores for each node of an Oracle Database Appliance X7-2-HA relate to active cores for Oracle RAC and Oracle Enterprise Edition and active cores for Oracle RAC One Node.

Table 2-3 Example of Bare Metal License Options for Oracle Database Appliance X7-2-HA Systems

Licensed Cores for Each Node (X7-2-HA Only)	Active Cores for Oracle RAC and Oracle Enterprise Edition (X7-2-HA Only)	Active Cores for Oracle RAC One Node (X7-2-HA Only)
2	4	2
4	8	4
6	12	6
8	16	8
10	20	10
12	24	12
14	28	14
16	32	16
18	36	18
20	40	20
22	44	22
24	48	24
26	52	26
28	56	28
30	60	30
32	64	32
34	68	34
36	72	36

Oracle Database Appliance X7-2 Licensed Core Licensing Options

Table 2-4 Bare Metal License Options for all Oracle Database Appliance X7-2 Systems

Licensed Cores for Single Node (X7-2S)	Licensed Cores for Single Node (X7-2M)
2	2
4	4
6	6
8	8
10	10
Not applicable	12
Not applicable	14
Not applicable	16
Not applicable	18
Not applicable	20
Not applicable	22
Not applicable	24
Not applicable	26
Not applicable	28
Not applicable	30
Not applicable	32
Not applicable	34
Not applicable	36

Oracle Database Appliance X6-2 Licensed Core Licensing Options

Table 2-5 Bare Metal License Options for all Oracle Database Appliance X6-2 Systems

Licensed Cores for Each Node	Active Cores for Oracle RAC and Oracle Enterprise Edition (X7-2-HA Only)	Active Cores for Oracle RAC One Node
2	4	2
4	8	4
6	12	6
8	16	8
10	20	10
12	24	12
14	28	14
16	32	16
18	36	18
20	40	20

Oracle Database Appliance X5-2 Licensed Core Licensing Options

Table 2-6 Bare Metal License Options for Oracle Database Appliance X5-2

Licensed Cores for Each Node	Active Cores for Oracle RAC and Oracle Enterprise Edition	Active Cores for Oracle RAC One Node
2	4	2
4	8	4
6	12	6
8	16	8
10	20	10
12	24	12
14	28	14
16	32	16
18	36	18
20	40	20
22	44	22
24	48	24
26	52	26
28	56	28
30	60	30
32	64	32
34	68	34
36	72	36

Oracle Database Appliance X4-2 Licensed Core Licensing Options

Table 2-7 Bare Metal License Options for Oracle Database Appliance X4-2

Licensed Cores for Each Node	Active Cores for Oracle RAC and Oracle Enterprise Edition	Active Cores for Oracle RAC One Node
2	4	2
4	8	4
6	12	6
8	16	8
10	20	10
12	24	12
14	28	14
16	32	16
18	36	18
20	40	20

Table 2-7 (Cont.) Bare Metal License Options for Oracle Database Appliance X4-2

Licensed Cores for Each Node	Active Cores for Oracle RAC and Oracle Enterprise Edition	Active Cores for Oracle RAC One Node
22	44	22
24	48	24

3

Capacity-On-Demand Licensing Information

This chapter provides capacity-on-demand licensing information for Oracle Database Appliance bare metal installations.

- [Oracle Database Appliance Capacity-on-Demand Licensing](#)
Capacity-on-Demand software licensing enables you to deploy as few or as many processors in Oracle Database Appliance as your workload requires.
- [Capacity-On-Demand Licensing for Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA](#)
Review capacity-on-demand licensing for Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA.
- [Capacity-On-Demand Licensing for Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA](#)
Review capacity-on-demand licensing for Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA.
- [Capacity-On-Demand Licensing for Oracle Database Appliance X6-2-HA](#)
Review capacity-on-demand licensing for Oracle Database Appliance X6-2-HA.
- [Capacity-On-Demand Licensing for Oracle Database Appliance X6-2M and X6-2L](#)
Review capacity-on-demand licensing for Oracle Database Appliance X6-2M and X6-2L.
- [Capacity-On-Demand Licensing for Oracle Database Appliance X6-2S](#)
Review capacity-on-demand licensing for Oracle Database Appliance X6-2S.
- [Capacity-On-Demand Licensing for Oracle Database Appliance X5-2](#)
Review capacity-on-demand licensing for Oracle Database Appliance X5-2.

Oracle Database Appliance Capacity-on-Demand Licensing

Capacity-on-Demand software licensing enables you to deploy as few or as many processors in Oracle Database Appliance as your workload requires.

Oracle Database Appliance's Capacity-on-Demand feature enables you to add more processor cores to scale up to increased system demands as you need to, without incurring the excessive costs and downtime usually associated with hardware upgrades. Additional cores are increased in 2-core increments.

Oracle Database Appliance Scaling Capabilities

The following table lists the scaling capacities for Oracle Database Appliance bare metal and virtualized platform deployments. The decision to use bare-metal or Oracle Database Appliance Virtualized Platform depends on your company policies and the benefits that each implementation offers your company.

Table 3-1 Oracle Database Appliance Scaling Capacities

Oracle Database Appliance Platform	Minimum Number Processor Cores	Maximum Number Processor Cores
X8-2S	2	16
X8-2M	2	32
X8-2-HA	2	64
X7-2S	2	10
X7-2M	2	36
X7-2-HA	2	72
X6-2S	2	10
X6-2M	2	20
X6-2L	2	20
X6-2-HA	2	40
X5-2	2	72
X4-2	2	48

Applications Deployed on Oracle Database Appliance and Capacity-on-Demand

All Oracle products that are deployed on Oracle Database Appliance can take advantage of Capacity-on-Demand licensing.



Note:

For the procedure to set the CPU Core Count, see the *Oracle Database Appliance Deployment and User Guide* for your hardware model.

Capacity-On-Demand Licensing for Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA

Review capacity-on-demand licensing for Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA.

For the procedure to set the CPU Core Count, see the *Oracle Database Appliance Deployment and User Guide* for your hardware model.

The following list describes the number of cores for each Oracle Database Appliance X8-2 model:

- Oracle Database Appliance X8-2S is a single server consisting of 16 cores.
- Oracle Database Appliance X8-2M is a single server consisting of 32 cores.
- Oracle Database Appliance X8-2-HA consists of two servers. Each server has 32 cores, for a total of 64 cores.

By default, Oracle Database Appliance ships with all cores enabled. You can reduce the number of active cores before or after deployment. You can increase the number

of active cores when additional capacity is needed. This is known as **capacity-on-demand**. Additional cores are increased in 2-core increments.

Rules and Restrictions for Setting CPU Core Count on Oracle Database Appliance X8-2S, X8-2M, and X8-2-HA Bare Metal Deployments

Review the following rules and restrictions before changing the CPU core count:

- You can change the CPU core count to a value that is a multiple of two between 2 and the maximum number of cores for the hardware model. For example, for X8-2-HA, between 2 and 32 cores for each server for a maximum of 64 cores.
- If you change the CPU core count, then you can subsequently only increase the CPU core count.
- You should only change the CPU core count if you need less than the maximum number of cores.

For example, if you change the CPU core count to 8, then you can subsequently increase the CPU core count to a higher number (in increments of 2 cores), but you cannot decrease the CPU core count.

- If you want the maximum number of cores for each server (32 cores per server for X8-2M and X8-2-HA), then use the default configuration. There is no need to set the CPU core count.



Note:

If you mistakenly followed the procedure to set your CPU core count to the maximum, thereby preventing you from subsequently decreasing your CPU core count, and the error is caught immediately, then contact Oracle Support.

Capacity-On-Demand Licensing for Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA

Review capacity-on-demand licensing for Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA.

For the procedure to set the CPU Core Count, see the *Oracle Database Appliance Deployment and User Guide* for your hardware model.

The following list describes the number of cores for each Oracle Database Appliance X7-2 model:

- Oracle Database Appliance X7-2S is a single server consisting of 10 cores.
- Oracle Database Appliance X7-2M is a single server consisting of 36 cores.
- Oracle Database Appliance X7-2-HA consists of two servers. Each server has 36 cores, for a total of 72 cores.

By default, Oracle Database Appliance ships with all cores enabled. You can reduce the number of active cores before or after deployment. You can increase the number of active cores when additional capacity is needed. This is known as **capacity-on-demand**. Additional cores are increased in 2-core increments.

Rules and Restrictions for Setting CPU Core Count on Oracle Database Appliance X7-2S, X7-2M, and X7-2-HA Bare Metal Deployments

Review the following rules and restrictions before changing the CPU core count:

- You can change the CPU core count to a value that is a multiple of two between 2 and the maximum number of cores for the hardware model. For example, for X7-2-HA, between 2 and 36 cores for each server for a maximum of 72 cores.
- If you change the CPU core count, then you can subsequently only increase the CPU core count.
- You should only change the CPU core count if you need less than the maximum number of cores.

For example, if you change the CPU core count to 8, then you can subsequently increase the CPU core count to a higher number (in increments of 2 cores), but you cannot decrease the CPU core count.

- If you want the maximum number of cores for each server (36 cores per server for X7-2M and X7-2-HA), then use the default configuration. There is no need to set the CPU core count.



Note:

If you mistakenly followed the procedure to set your CPU core count to the maximum, thereby preventing you from subsequently decreasing your CPU core count, and the error is caught immediately, then contact Oracle Support.

Capacity-On-Demand Licensing for Oracle Database Appliance X6-2-HA

Review capacity-on-demand licensing for Oracle Database Appliance X6-2-HA.

Oracle Database Appliance X6-2-HA consists of two servers. Each server has 20 CPU cores. By default, Oracle Database Appliance ships with all cores enabled on both servers:

- 20 CPU cores enabled on each of the two servers
- 40 enabled CPU cores

Rules and Restrictions for Setting CPU Core Count on Oracle Database Appliance X6-2-HA

Review the following rules and restrictions before changing the CPU core count:

- You can change the CPU core count to a value that is a multiple of two between 2 and 20 for each server.
- If you change the CPU core count, then you can subsequently only increase the CPU core count.

For example, if you change the CPU core count to 12, then you can subsequently change the CPU core count to 16, or 20. If you later change the CPU core count to 16, then you can subsequently change the CPU core count to 20.

- If you want 20 CPU cores for each server, then use the default configuration. There is no need to set the CPU core count to 40.

 Note:

If you mistakenly followed the procedure to set your CPU core count to 40, thereby preventing you from subsequently decreasing your CPU core count, and the error is caught immediately, then contact Oracle Support.

Capacity-On-Demand Licensing for Oracle Database Appliance X6-2M and X6-2L

Review capacity-on-demand licensing for Oracle Database Appliance X6-2M and X6-2L.

Oracle Database Appliance X6-2M and X6-2L are each a single server consisting of 20 cores. By default, Oracle Database Appliance ships with all cores enabled. Capacity-on-demand is only applicable to Oracle Database Enterprise Edition software.

The number of active cores can be reduced before or after deployment. The number of active cores can be increased when additional capacity is needed. This is known as **capacity-on-demand**. Additional cores are increased in 2-core increments.

Rules and Restrictions for Setting CPU Core Count on Oracle Database Appliance X6-2M and X6-2L Bare Metal Deployments

Review the following rules and restrictions before changing the CPU core count:

- You can change the CPU core count to a value that is a multiple of two between 2 and 20.
- If you change the CPU core count, then you can subsequently only increase the CPU core count.
- You should only change the CPU core count if you need less than 20 cores.

 Note:

If you mistakenly followed the procedure to set your CPU core count to 20, thereby preventing you from subsequently decreasing your CPU core count, then contact Oracle Support.

Capacity-On-Demand Licensing for Oracle Database Appliance X6-2S

Review capacity-on-demand licensing for Oracle Database Appliance X6-2S.

Oracle Database Appliance X6-2S is a single server consisting of 10 cores. By default, Oracle Database Appliance ships with all cores enabled. Capacity-on-demand is only applicable to Oracle Database Enterprise Edition software.

The number of active cores can be reduced before or after deployment. The number of active cores can be increased when additional capacity is needed. This is known as **capacity-on-demand**. Additional cores are increased in 2-core increments.

Rules and Restrictions for Setting CPU Core Count on Oracle Database Appliance X6-2S Bare Metal Deployments

Review the following rules and restrictions before changing the CPU core count:

- You can change the CPU core count to a value that is a multiple of two between 2 and 10.
- If you change the CPU core count, then you can subsequently only increase the CPU core count.
- You should only change the CPU core count if you need less than 10 cores.



Note:

If you mistakenly followed the procedure to set your CPU core count to 10, thereby preventing you from subsequently decreasing your CPU core count, then contact Oracle Support.

Capacity-On-Demand Licensing for Oracle Database Appliance X5-2

Review capacity-on-demand licensing for Oracle Database Appliance X5-2.

Oracle Database Appliance X5-2 consists of two servers. Each server has 36 CPU cores. By default, Oracle Database Appliance ships with all cores enabled on both servers:

- 36 CPU cores enabled on each of the two servers
- 72 enabled CPU cores

You can use the default CPU core count of 2 for each server, or you can change the CPU core count by following the procedure in "Setting the CPU Core Count on Oracle Database Appliance X5-2 Bare Metal Deployments". For example, if you change the CPU core count to 18 for each server, then:

- 18 CPU cores are enabled on each of the two servers
- You have a total of 36 enabled CPU cores

Rules and Restrictions for Setting CPU Core Count on Oracle Database Appliance X5-2 Bare Metal Deployments

Review the following rules and restrictions before changing the CPU core count:

- You can change the CPU core count to a value that is a multiple of two between 2 and 36 for each server.
- If you change the CPU core count, then you can subsequently only increase the CPU core count.

For example, if you change the CPU core count to 28, then you can subsequently change the CPU core count to 30, 32, 34, or 36. If you later change the CPU core count to 34, then you can subsequently change the CPU core count to 36.

- If your desired CPU core count is 36 for each server, then use the default configuration. There is no need to follow the procedure in "Setting the CPU Core Count on Oracle Database Appliance X5-2 Bare Metal Deployments" to set the CPU core count to 36.



Note:

If you mistakenly followed the procedure to set your CPU core count to 36, thereby preventing you from subsequently decreasing your CPU core count, and the error is caught immediately, then contact Oracle Support.

Third-Party Product Licenses for This Release

This chapter contains the licenses for the third-party products that are included with Oracle Database Appliance for this release.

- [Oracle Database Licensing Information](#)
Review Oracle Database Appliance licensing information.
- [Other Third-Party Product Licenses](#)
Review other third-party product licenses for Oracle Database Appliance.

Oracle Database Licensing Information

Review Oracle Database Appliance licensing information.

Oracle Database Appliance includes the third-party products that are used in Oracle Database 19c, Oracle Database 18c, Oracle Database 12c release 2 (12.2), Oracle Database 12c release 1 (12.1), and Oracle Database 11g release 2 (11.2). To view the licenses for these third-party products, refer to the release-specific Oracle Database Licensing Information User Manual.

Related Topics

- [Licensing Information User Manual Oracle Database 19c](#)
- [Licensing Information User Manual Oracle Database 18c](#)
- [Licensing Information User Manual Oracle Database 12c Release 2](#)
- [Licensing Information User Manual Oracle Database 12c Release 1](#)
- [Oracle Database Licensing Information User Manual 11g Release 2 \(11.2\)](#)

Other Third-Party Product Licenses

Review other third-party product licenses for Oracle Database Appliance.

Required notices for open source or other separately licensed software products or components distributed in Oracle Database Appliance release 19.12 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 software.

Table 4-1 Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
Coda Hale and Yammer, Inc	dropwizard 1.3.29:	Copyright © 2010-2013 Coda Hale and Yammer, Inc., 2014-2016 Dropwizard Team
	• dropwizard-core-1.3.29 • dropwizard-auth-1.3.29 • dropwizard-assets-1.3.29	This product includes software developed by Coda Hale and Yammer, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
The Apache Zookeeper Project	Zookeeper 3.7.0	Apache ZooKeeper Copyright © 2009-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 4-1 (Cont.) Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
Apache	dropwizard-Configurable-assets-bundle 1.3.5	Copyright © 2012-2015 dropwizard-bundles.io and Bazaarvoice, Inc. This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	commons-lang3 3.11	Apache Commons Lang Copyright © 2001-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 4-1 (Cont.) Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
Apache	HttpClient 4.5.13	Apache HTTPClient Copyright © 1999-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Free Software Foundation, Inc. hibernate.org	hibernate-core 5.4.29.Final	Copyright © 2001-2021 Red Hat, Inc. All Rights Reserved. This product is licensed under the GNU Lesser General Public license. See GNU Lesser General Public License, Version 2.1.
Free Software Foundation, Inc.	hibernate-validator 5.4.3.Final	Copyright information is available at the following location: https://github.com/hibernate/hibernate-validator/blob/5.4.3.Final/copyright.txt This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 4-1 (Cont.) Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
Apache Commons IO	commons-io 2.8.0	Apache Commons IO Copyright © 2002-2020 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	jettison 1.4.1	Copyright © 2006, Envoi Solutions LLC Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Cédric Beust	jcommander 1.78	Copyright © 2012, Cedric Beust Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 4-1 (Cont.) Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
Apache	freemarker 2.3.29	Apache FreeMarker Copyright © 2015-2018 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Connect2id	nimbus-jose-jwt 8.6	Nimbus JOSE + JWT Copyright © 2012-2020, Connect2id Ltd. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See The Apache Software License, Version 2.0.
Apache	jackson-annotations 2.12.1	Copyright © 2008–2020 FasterXML. All rights reserved. This copy of Jackson JSON processor annotations is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 See The Apache Software License, Version 2.0.

Table 4-1 (Cont.) Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
Software AG	quartz 2.3.2	Copyright © 2003-2012 Terracotta, Inc., a wholly-owned subsidiary of Software AG USA, Inc. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Google	guava 30.1-jre	Copyright © 2010-2021. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 4-1 (Cont.) Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
QOS.ch	slf4j 1.7.30	SLF4J source code and binaries are distributed under the MIT license. Copyright © 2004-2017 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. These terms are identical to those of the MIT License, also called the X License or the X11 License, which is a simple, permissive non-copyleft free software license. It is deemed compatible with virtually all types of licenses, commercial or otherwise. In particular, the Free Software Foundation has declared it compatible with GNU GPL. It is also known to be approved by the Apache Software Foundation as compatible with Apache Software License.

Table 4-1 (Cont.) Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
Oracle JET	Oracle JET 10.0.4	Copyright © 2020, Oracle and/or its affiliates. All rights reserved. The Universal Permissive License (UPL), Version 1.0 Subject to the condition set forth below, permission is hereby granted to any person obtaining a copy of this software, associated documentation and/or data (collectively the "Software"), free of charge and under any and all copyright rights in the Software, and any and all patent rights owned or freely licensable by each licensor hereunder covering either (i) the unmodified Software as contributed to or provided by such licensor, or (ii) the Larger Works (as defined below), to deal in both (a) the Software, and (b) any piece of software and/or hardware listed in the lrgwrks.txt file if one is included with the Software (each a Larger Work to which the Software is contributed by such licensors), without restriction, including without limitation the rights to copy, create derivative works of, display, perform, and distribute the Software and make, use, sell, offer for sale, import, export, have made, and have sold the Software and the Larger Work(s), and to sublicense the foregoing rights on either these or other terms. This license is subject to the following condition: The above copyright notice and either this complete permission notice or at a minimum a reference to the UPL must be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Table 4-1 (Cont.) Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
Apache	jackson-databind 2.12.1	Copyright © 2008–2020 FasterXML. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	jackson-core 2.12.1	Copyright 2008–2020 FasterXML. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	jackson-jaxrs-json-provider 2.12.1	Jackson JAXRS JSON Copyright 2021 FasterXML. All Rights Reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 4-1 (Cont.) Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
Apache	httpcore 4.4.14	Copyright 2005-2020 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	commons-codec 1.15	Copyright 2002-2021 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 4-1 (Cont.) Open Source or Other Separately Licensed Software

Provider	Component	Licensing Information
Apache	joda-time 2.10.10	Copyright © 2002-2021 Joda.org. This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
QOS.ch	logback-core 1.2.3	Copyright © 2019 QOS.ch. See The Apache Software License, Version 2.0 and Eclipse Public License for applicable licenses.
Apache	jetty-util 9.4.39.v20210325	Copyright © 1995-2020 Mort Bay Consulting Pty Ltd and others. All rights reserved. See The Apache Software License, Version 2.0 and Eclipse Public License for applicable licenses.
Apache	jetty-servlets 9.4.39.v20210325	Copyright © 1995-2020 Mort Bay Consulting Pty Ltd and others. All rights reserved. See The Apache Software License, Version 2.0 and Eclipse Public License for applicable licenses.
Apache	jsr305 3.0.2	Copyright © JSR305 expert group. All rights reserved. See The Apache Software License, Version 2.0.
Natural Language Toolkit (NLTK)	nlTK 3.5	Copyright © 2001-2020 NLTK Project. All rights reserved. See The Apache Software License, Version 2.0.
Python Software Foundation	python 3.9.5	Copyright © 2001-2021, Python Software Foundation. All rights reserved. See Python Software License.

5

Third-Party Product Licenses for Earlier Releases of Oracle Database Appliance

This chapter contains the licenses for the third-party products that are included with earlier releases of Oracle Database Appliance.

- [Third-Party Product Licenses for Releases 12.2.1.3 and 12.2.1.4](#)
Review third-party product licenses for Releases 12.2.1.3 and 12.2.1.4 of Oracle Database Appliance.
- [Third-Party Product Licenses for Release 12.2.1.2](#)
Review third-party product licenses for Release 12.2.1.2 of Oracle Database Appliance.
- [Third-Party Product Licenses for Release 12.2.1.1 and Earlier](#)
Review third-party product licenses for earlier releases of Oracle Database Appliance.

Third-Party Product Licenses for Releases 12.2.1.3 and 12.2.1.4

Review third-party product licenses for Releases 12.2.1.3 and 12.2.1.4 of Oracle Database Appliance.

Required notices for open source or other separately licensed software products or components distributed in Oracle Database Appliance Releases 12.2.1.3 and 12.2.1.4 are identified in this topic along with the applicable licensing information. Additional notices and/or licenses may be found in the included documentation or readme files of the individual third party software.

Table 5-1 Open Source or Other Separately Licensed Software for Releases 12.2.1.3 and 12.2.1.4

Provider	Component	Licensing Information
Coda Hale and Yammer, Inc	dropwizard-core 0.9.2	Copyright 2010-2013 Coda Hale and Yammer, Inc., 2014-2015 Dropwizard Team This product includes software developed by Coda Hale and Yammer, Inc. This product is licensed under the Apache 2.0 license agreement. See The Apache Software License, Version 2.0 .
Coda Hale and Yammer, Inc	dropwizard-auth 0.9.2	Copyright 2010-2013 Coda Hale and Yammer, Inc., 2014-2015 Dropwizard Team This product includes software developed by Coda Hale and Yammer, Inc. This product is licensed under the Apache 2.0 license agreement. See The Apache Software License, Version 2.0 .

Table 5-1 (Cont.) Open Source or Other Separately Licensed Software for Releases 12.2.1.3 and 12.2.1.4

Provider	Component	Licensing Information
Coda Hale and Yammer, Inc	dropwizard-assets 0.9.2	Copyright 2010-2013 Coda Hale and Yammer, Inc., 2014-2015 Dropwizard Team This product includes software developed by Coda Hale and Yammer, Inc. This product is licensed under the Apache 2.0 license agreement. See The Apache Software License, Version 2.0.
Coda Hale and Yammer, Inc	dropwizard-configurable-assets-bundle 0.2.2	Copyright 2010-2013 Coda Hale and Yammer, Inc., 2014-2016 Dropwizard Team This product includes software developed by Coda Hale and Yammer, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache Zookeeper Project	Zookeeper 3.4.9 Zookeeper 3.4.5	Zookeeper 3.4.9: Apache ZooKeeper Copyright 2009-2016 The Apache Software Foundation Zookeeper 3.4.5: Apache ZooKeeper Copyright 2009-2011 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). See The Apache Software License, Version 2.0.
The Apache DB Project	derby 10.11.1.1	Copyright 2004-2014 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 5-1 (Cont.) Open Source or Other Separately Licensed Software for Releases 12.2.1.3 and 12.2.1.4

Provider	Component	Licensing Information
Apache	commons-lang3 3.4	Apache Commons Lang Copyright 2001-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	HttpComponents HttpClient 4.5.1	Apache HTTPComponents Apache HttpClient Copyright 1999-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Free Software Foundation, Inc. hibernate.org	hibernate-core 4.3.9.Final	Copyright 2004 Red Hat, Inc. This product is licensed under the GNU Lesser General Public license. See GNU Lesser General Public License, Version 2.1.
Free Software Foundation, Inc.	hibernate-entitymanager 4.3.9.Final	Copyright 2004 Red Hat, Inc. This product is licensed under the GNU Lesser General Public license. See GNU Lesser General Public License, Version 2.1.

Table 5-1 (Cont.) Open Source or Other Separately Licensed Software for Releases 12.2.1.3 and 12.2.1.4

Provider	Component	Licensing Information
Jonathan Hedley	jsoup 1.8.3	Copyright 2009 - 2017 Jonathan Hedley (jonathan@hedley.net) 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.
Apache Commons IO	commons-io 2.1 and commons-io 2.5	Apache Commons IO Copyright 2002-2017 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Oracle GlassFish	jersey-client 2.16	Copyright 2012-2017 Oracle and/or its affiliates. All rights reserved. Jersey is dual licensed under 2 OSI approved licenses : • COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL - Version 1.1) • GNU General Public License (GPL - Version 2, June 1991) with the ["Classpath Exception"] See the license information at COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1

Table 5-1 (Cont.) Open Source or Other Separately Licensed Software for Releases 12.2.1.3 and 12.2.1.4

Provider	Component	Licensing Information
Oracle GlassFish	jersey-media-multipart 2.23	Copyright 2012-2017 Oracle and/or its affiliates. All rights reserved. Jersey is dual licensed under 2 OSI approved licenses : • COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL - Version 1.1) • GNU General Public License (GPL - Version 2, June 1991) with the ["Classpath Exception"] See the license information at COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1
Apache	jettison 1.1	Copyright 2006, Envoi Solutions LLC Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Cédric Beust	jcommander 1.30	Copyright 2010, Cedric Beust Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	freemarker 2.3.23	Apache FreeMarker Copyright 2014 Attila Szegedi, Daniel Dekany, Jonathan Revusky Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 5-1 (Cont.) Open Source or Other Separately Licensed Software for Releases 12.2.1.3 and 12.2.1.4

Provider	Component	Licensing Information
Project Lombok https://projectlombok.org/	lombok 1.16.6	Copyright (C) 2009-2015 The Project Lombok Authors. Copyright (C) 2009-2015 The Project Lombok Authors. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. See MIT License.
Apache	jackson-annotations 2.7.3	Copyright for jackson-annotations 2.7.3 Copyright 2008–2016 FasterXML. All rights reserved. This copy of Jackson JSON processor annotations is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivative works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 See The Apache Software License, Version 2.0.
Thomas Rausch	jarchivelib 0.3.0	Copyright 2013-2016 Thomas Rausch Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Sam Hocevar	reflections 0.9.10	Copyright (C) 2004 Sam Hocevar sam@hocevar.net The license agreement is here: http://www.wtfpl.net/about/

Table 5-1 (Cont.) Open Source or Other Separately Licensed Software for Releases 12.2.1.3 and 12.2.1.4

Provider	Component	Licensing Information
RedHat	validation-api 1.1.0.Final	# List of contributors Emmanuel Bernard Gunnar Morling Hardy Ferentschik Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Software AG	quartz 2.0.2	Copyright 2001-2009 Terracotta, Inc., a wholly-owned subsidiary of Software AG USA, Inc. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Google	guava 19.0	Copyright 2018 The Guava Authors Contributors: Doug Lea Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 5-1 (Cont.) Open Source or Other Separately Licensed Software for Releases 12.2.1.3 and 12.2.1.4

Provider	Component	Licensing Information
Apache	Log4J 1.2.17	Apache log4j Copyright 2007 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
QOS.ch	slf4j-simple 1.7.21	SLF4J source code and binaries are distributed under the MIT license. Copyright (c) 2004-2017 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. These terms are identical to those of the MIT License, also called the X License or the X11 License, which is a simple, permissive non-copyleft free software license. It is deemed compatible with virtually all types of licenses, commercial or otherwise. In particular, the Free Software Foundation has declared it compatible with GNU GPL. It is also known to be approved by the Apache Software Foundation as compatible with Apache Software License.

Third-Party Product Licenses for Release 12.2.1.2

Review third-party product licenses for Release 12.2.1.2 of Oracle Database Appliance.

Required notices for open source or other separately licensed software products or components distributed in Oracle Database Appliance Release 12.2.1.2 are identified in this topic along with the applicable licensing information. Additional notices and/or licenses may be found in the included documentation or readme files of the individual third party software.

Table 5-2 Open Source or Other Separately Licensed Software for Release 12.2.1.2

Provider	Component	Licensing Information
Coda Hale and Yammer, Inc	dropwizard-core 0.9.2	Copyright 2010-2013 Coda Hale and Yammer, Inc., 2014-2015 Dropwizard Team This product includes software developed by Coda Hale and Yammer, Inc. This product is licensed under the Apache 2.0 license agreement. See The Apache Software License, Version 2.0 .
Coda Hale and Yammer, Inc	dropwizard-auth 0.9.2	Copyright 2010-2013 Coda Hale and Yammer, Inc., 2014-2015 Dropwizard Team This product includes software developed by Coda Hale and Yammer, Inc. This product is licensed under the Apache 2.0 license agreement. See The Apache Software License, Version 2.0 .
Coda Hale and Yammer, Inc	dropwizard-assets 0.8.0	Copyright 2010-2013 Coda Hale and Yammer, Inc. This product includes software developed by Coda Hale and Yammer, Inc. This product is licensed under the Apache 2.0 license agreement. See The Apache Software License, Version 2.0 .
Coda Hale and Yammer, Inc	dropwizard-configurable-assets-bundle 0.2.2	Copyright 2010-2013 Coda Hale and Yammer, Inc., 2014-2016 Dropwizard Team This product includes software developed by Coda Hale and Yammer, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 . Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0 .

Table 5-2 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.2

Provider	Component	Licensing Information
Apache Zookeeper Project	Zookeeper 3.4.9 Zookeeper 3.4.5	Zookeeper 3.4.9: Apache ZooKeeper Copyright 2009-2016 The Apache Software Foundation Zookeeper 3.4.5: Apache ZooKeeper Copyright 2009-2011 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). See The Apache Software License, Version 2.0.
The Apache DB Project	derby 10.11.1.1	Copyright 2004-2014 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	commons-lang3 3.4	Apache Commons Lang Copyright 2001-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 5-2 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.2

Provider	Component	Licensing Information
Apache	HttpComponents HttpClient 4.5.1	Apache HTTPComponents Apache HttpClient Copyright 1999-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Free Software Foundation, Inc. hibernate.org	hibernate-core 4.3.9.Final	Copyright 2004 Red Hat, Inc. This product is licensed under the GNU Lesser General Public license. See GNU Lesser General Public License, Version 2.1.
Free Software Foundation, Inc.	hibernate-entitymanager 4.3.9.Final	Copyright 2004 Red Hat, Inc. This product is licensed under the GNU Lesser General Public license. See GNU Lesser General Public License, Version 2.1.
Jonathan Hedley	jsoup 1.8.3	Copyright 2009 - 2017 Jonathan Hedley (jonathan@hedley.net) Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

Table 5-2 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.2

Provider	Component	Licensing Information
Apache Commons IO	commons-io 2.1 and commons-io 2.5	Apache Commons IO Copyright 2002-2017 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Oracle GlassFish	jersey-client 2.16	Copyright 2012-2017 Oracle and/or its affiliates. All rights reserved. Jersey is dual licensed under 2 OSI approved licenses : • COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL - Version 1.1) • GNU General Public License (GPL - Version 2, June 1991) with the ["Classpath Exception"] See the license information at COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1
Oracle GlassFish	jersey-media-multipart 2.23	Copyright 2012-2017 Oracle and/or its affiliates. All rights reserved. Jersey is dual licensed under 2 OSI approved licenses : • COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL - Version 1.1) • GNU General Public License (GPL - Version 2, June 1991) with the ["Classpath Exception"] See the license information at COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1
Apache	jettison 1.1	Copyright 2006, Envoi Solutions LLC Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 5-2 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.2

Provider	Component	Licensing Information
Cédric Beust	jcommander 1.30	Copyright 2010, Cedric Beust Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	freemarker 2.3.23	Apache FreeMarker Copyright 2014 Attila Szegedi, Daniel Dekany, Jonathan Revusky Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Project Lombok https:// projectlombok.org/	lombok 1.16.6	Copyright (C) 2009-2015 The Project Lombok Authors. Copyright (C) 2009-2015 The Project Lombok Authors. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. See MIT License.

Table 5-2 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.2

Provider	Component	Licensing Information
Apache	jackson-annotations 2.7.3	Copyright for jackson-annotations 2.7.3 Copyright 2008–2016 FasterXML. All rights reserved. This copy of Jackson JSON processor annotations is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivate works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 See The Apache Software License, Version 2.0.
Thomas Rausch	jarchivelib 0.3.0	Copyright 2013-2016 Thomas Rausch Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Sam Hocevar	reflections 0.9.10	Copyright (C) 2004 Sam Hocevar sam@hocevar.net The license agreement is here: http://www.wtfpl.net/about/
RedHat	validation-api 1.1.0.Final	# List of contributors Emmanuel Bernard Gunnar Morling Hardy Ferentschik Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 5-2 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.2

Provider	Component	Licensing Information
Software AG	quartz 2.0.2	Copyright 2001-2009 Terracotta, Inc., a wholly-owned subsidiary of Software AG USA, Inc. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Google	guava 19.0	Copyright 2018 The Guava Authors Contributors: Doug Lea Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	Log4J 1.2.17	Apache log4j Copyright 2007 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 5-2 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.2

Provider	Component	Licensing Information
QOS.ch	slf4j-simple 1.7.21	SLF4J source code and binaries are distributed under the MIT license. Copyright (c) 2004-2017 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. These terms are identical to those of the MIT License, also called the X License or the X11 License, which is a simple, permissive non-copyleft free software license. It is deemed compatible with virtually all types of licenses, commercial or otherwise. In particular, the Free Software Foundation has declared it compatible with GNU GPL. It is also known to be approved by the Apache Software Foundation as compatible with Apache Software License.

Third-Party Product Licenses for Release 12.2.1.1 and Earlier

Review third-party product licenses for earlier releases of Oracle Database Appliance.

Required notices for open source or other separately licensed software products or components distributed in Oracle Database Appliance Release 12.2.1.1 and earlier are identified in this topic along with the applicable licensing information. Additional notices and/or licenses may be found in the included documentation or readme files of the individual third party software.

The notices listed in the following table applies to Oracle Database Appliance Releases 12.1.2.7, 12.1.2.8, 12.1.2.9, 12.1.2.11, 12.1.2.12, and 12.2.1.1.

Table 5-3 Open Source or Other Separately Licensed Software for Release 12.2.1.1 and Earlier

Provider	Component	Licensing Information
Coda Hale and Yammer, Inc	dropwizard-core 0.8.0	Copyright 2010-2013 Coda Hale and Yammer, Inc. This product includes software developed by Coda Hale and Yammer, Inc. This product is licensed under the Apache 2.0 license agreement. See The Apache Software License, Version 2.0 .
Coda Hale and Yammer, Inc	dropwizard-auth 0.9.2	Copyright 2010-2013 Coda Hale and Yammer, Inc., 2014-2015 Dropwizard Team This product includes software developed by Coda Hale and Yammer, Inc. This product is licensed under the Apache 2.0 license agreement. See The Apache Software License, Version 2.0 .
Coda Hale and Yammer, Inc	dropwizard-assets 0.8.0	Copyright 2010-2013 Coda Hale and Yammer, Inc. This product includes software developed by Coda Hale and Yammer, Inc. This product is licensed under the Apache 2.0 license agreement. See The Apache Software License, Version 2.0 .
Coda Hale and Yammer, Inc	dropwizard-configurable-assets-bundle 0.2.2	Copyright 2010-2013 Coda Hale and Yammer, Inc., 2014-2016 Dropwizard Team This product includes software developed by Coda Hale and Yammer, Inc. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 . Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0 .
Apache Zookeeper Project	Zookeeper 3.4.9 Zookeeper 3.4.5	Zookeeper 3.4.9: Apache ZooKeeper Copyright 2009-2016 The Apache Software Foundation Zookeeper 3.4.5: Apache ZooKeeper Copyright 2009-2011 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). See The Apache Software License, Version 2.0 .

Table 5-3 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.1 and Earlier

Provider	Component	Licensing Information
The Apache DB Project	derby 10.11.1.1	Copyright 2004-2014 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 . Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0 .
Apache	commons-lang3 3.4	Apache Commons Lang Copyright 2001-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 . Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0 .
Apache	HttpComponents HttpClient 4.5.1	Apache HTTPComponents Apache HttpClient Copyright 1999-2018 The Apache Software Foundation This product includes software developed at The Apache Software Foundation (http://www.apache.org/). Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 . Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0 .
Free Software Foundation, Inc. hibernate.org	hibernate-core 4.3.9.Final	Copyright 2004 Red Hat, Inc. This product is licensed under the GNU Lesser General Public license. See GNU Lesser General Public License, Version 2.1 .

Table 5-3 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.1 and Earlier

Provider	Component	Licensing Information
Free Software Foundation, Inc.	hibernate-entitymanager 4.3.9.Final	Copyright 2004 Red Hat, Inc. This product is licensed under the GNU Lesser General Public license. See GNU Lesser General Public License, Version 2.1 .
Jonathan Hedley	jsoup 1.8.3	Copyright 2009 - 2017 Jonathan Hedley (jonathan@hedley.net) 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.
Apache Commons IO	commons-io 2.1 and commons-io 2.5	Apache Commons IO Copyright 2002-2017 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0 . Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0 .

Table 5-3 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.1 and Earlier

Provider	Component	Licensing Information
Oracle GlassFish	jersey-client 2.16	Copyright 2012-2017 Oracle and/or its affiliates. All rights reserved. Jersey is dual licensed under 2 OSI approved licenses : • COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL - Version 1.1) • GNU General Public License (GPL - Version 2, June 1991) with the ["Classpath Exception"] See the license information at COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1
Oracle GlassFish	jersey-media-multipart 2.23	Copyright 2012-2017 Oracle and/or its affiliates. All rights reserved. Jersey is dual licensed under 2 OSI approved licenses : • COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL - Version 1.1) • GNU General Public License (GPL - Version 2, June 1991) with the ["Classpath Exception"] See the license information at COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1
Apache	jettison 1.1	Copyright 2006, Envoi Solutions LLC Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Cédric Beust	jcommander 1.30	Copyright 2010, Cedric Beust Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 5-3 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.1 and Earlier

Provider	Component	Licensing Information
Apache	freemarker 2.3.23	Apache FreeMarker Copyright 2014 Attila Szegedi, Daniel Dekany, Jonathan Revusky Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Project Lombok https:// projectlombok.org/	lombok 1.16.6	Copyright (C) 2009-2015 The Project Lombok Authors. Copyright (C) 2009-2015 The Project Lombok Authors. Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions: The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software. THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE. See MIT License.
Apache	jackson-annotations 2.7.3	Copyright for jackson-annotations 2.7.3 Copyright 2008–2016 FasterXML. All rights reserved. This copy of Jackson JSON processor annotations is licensed under the Apache (Software) License, version 2.0 ("the License"). See the License for details about distribution rights, and the specific rights regarding derivative works. You may obtain a copy of the License at: http://www.apache.org/licenses/LICENSE-2.0 See The Apache Software License, Version 2.0.

Table 5-3 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.1 and Earlier

Provider	Component	Licensing Information
Thomas Rausch	jarchivelib 0.3.0	Copyright 2013-2016 Thomas Rausch Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Sam Hocevar	reflections 0.9.10	Copyright (C) 2004 Sam Hocevar sam@hocevar.net The license agreement is here: http://www.wtfpl.net/about/
RedHat	validation-api 1.1.0.Final	# List of contributors Emmanuel Bernard Gunnar Morling Hardy Ferentschik Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Software AG	quartz 2.0.2	Copyright 2001-2009 Terracotta, Inc., a wholly-owned subsidiary of Software AG USA, Inc. All rights reserved. Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 5-3 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.1 and Earlier

Provider	Component	Licensing Information
Google	guava 19.0	Copyright 2018 The Guava Authors Contributors: Doug Lea Licensed under the Apache License, Version 2.0 (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 See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.
Apache	Log4J 1.2.17	Apache log4j Copyright 2007 The Apache Software Foundation Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at http://www.apache.org/licenses/LICENSE-2.0. Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or See the License for the specific language governing permissions and limitations under the License. See The Apache Software License, Version 2.0.

Table 5-3 (Cont.) Open Source or Other Separately Licensed Software for Release 12.2.1.1 and Earlier

Provider	Component	Licensing Information
QOS.ch	slf4j-simple 1.7.21	SLF4J source code and binaries are distributed under the MIT license. Copyright (c) 2004-2017 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. These terms are identical to those of the MIT License, also called the X License or the X11 License, which is a simple, permissive non-copyleft free software license. It is deemed compatible with virtually all types of licenses, commercial or otherwise. In particular, the Free Software Foundation has declared it compatible with GNU GPL. It is also known to be approved by the Apache Software Foundation as compatible with Apache Software License.

A

Open Source Software License Text

- [The Apache Software License, Version 2.0](#)
- [GNU Lesser General Public License, Version 2.1](#)
- [Eclipse Public License - v 1.0](#)
- [Python Software License](#)
- [COMMON DEVELOPMENT AND DISTRIBUTION LICENSE \(CDDL\) Version 1.1](#)

The Apache Software License, Version 2.0

The following applies to all products licensed under the Apache 2.0 License:

You may not use the identified files except in compliance with the Apache License, Version 2.0 (the "License.")

You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0>. A copy of the license is also reproduced below.

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

See the License for the specific language governing permissions and limitations under the License.

Apache License

Version 2.0, January 2004

<http://www.apache.org/licenses/>

TERMS AND CONDITIONS FOR USE, REPRODUCTION, 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.

GNU Lesser General Public License, Version 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

0. This License Agreement applies to any software library or other program which contains a notice placed by the copyright holder or other authorized party saying it may be distributed under the terms of this Lesser General Public License (also called "this License"). Each licensee is addressed as "you".

A "library" means a collection of software functions and/or data prepared so as to be conveniently linked with application programs (which use some of those functions and data) to form executables.

The "Library", below, refers to any such software library or work which has been distributed under these terms. A "work based on the Library" means either the Library or any derivative work under copyright law: that is to say, a work containing the Library or a portion of it, either verbatim or with modifications and/or translated straightforwardly into another language. (Hereinafter, translation is included without limitation in the term "modification".)

"Source code" for a work means the preferred form of the work for making modifications to it. For a library, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the library.

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running a program using the Library is not restricted, and output from such a program is covered only if its contents constitute a work based on the Library (independent of the use of the Library in a tool for writing it). Whether that is true depends on what the Library does and what the program that uses the Library does.

1. You may copy and distribute verbatim copies of the Library's complete source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and distribute a copy of this License along with the Library.

You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.

2. You may modify your copy or copies of the Library or any portion of it, thus forming a work based on the Library, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:

- **a)** The modified work must itself be a software library.
- **b)** You must cause the files modified to carry prominent notices stating that you changed the files and the date of any change.
- **c)** You must cause the whole of the work to be licensed at no charge to all third parties under the terms of this License.
- **d)** If a facility in the modified Library refers to a function or a table of data to be supplied by an application program that uses the facility, other than as an argument passed when the facility is invoked, then you must make a good faith effort to ensure that, in the event an application does not supply such function or table, the facility still operates, and performs whatever part of its purpose remains meaningful.

(For example, a function in a library to compute square roots has a purpose that is entirely well-defined independent of the application. Therefore, Subsection 2d requires that any application-supplied function or table used by this function must be optional: if the application does not supply it, the square root function must still compute square roots.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Library, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Library, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it.

Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Library.

In addition, mere aggregation of another work not based on the Library with the Library (or with a work based on the Library) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

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 MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LIBRARY IS WITH YOU. SHOULD THE LIBRARY PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

16. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY AND/OR REDISTRIBUTE THE LIBRARY AS PERMITTED ABOVE, BE LIABLE TO YOU FOR DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE LIBRARY (INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF THE LIBRARY TO OPERATE WITH ANY OTHER SOFTWARE), EVEN IF SUCH HOLDER OR OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Libraries

If you develop a new library, and you want it to be of the greatest possible use to the public, we recommend making it free software that everyone can redistribute and change. You can do so by permitting redistribution under these terms (or, alternatively, under the terms of the ordinary General Public License).

To apply these terms, attach the following notices to the library. It is safest to attach them to the start of each source file to most effectively convey the exclusion of warranty; and each file should have at least the "copyright" line and a pointer to where the full notice is found.

one line to give the library's name and an idea of what it does. Copyright (C) year name of author This library is free software; you can redistribute it and/or modify it under the terms of the GNU Lesser General Public License as published by the Free Software Foundation; either version 2.1 of the License, or (at your option) any later version. This library is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU Lesser General Public License for more details. You should have received a copy of the GNU Lesser General Public License along with this library; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA

Also add information on how to contact you by electronic and paper mail.

You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the library, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the library `Frob' (a library for tweaking knobs) written by James Random Hacker. signature of Ty Coon, 1 April 1990 Ty Coon, President of Vice

That's all there is to it!

Eclipse Public License - v 1.0

THE ACCOMPANYING PROGRAM IS PROVIDED UNDER THE TERMS OF THIS ECLIPSE PUBLIC LICENSE ("AGREEMENT"). ANY USE, REPRODUCTION OR DISTRIBUTION OF THE PROGRAM CONSTITUTES RECIPIENT'S ACCEPTANCE OF THIS AGREEMENT.

1. DEFINITIONS

"Contribution" means:

- a) in the case of the initial Contributor, the initial code and documentation distributed under this Agreement, and
- b) in the case of each subsequent Contributor:
 - i) changes to the Program, and
 - ii) additions to the Program;

where such changes and/or additions to the Program originate from and are distributed by that particular Contributor. A Contribution 'originates' from a Contributor if it was added to the Program by such Contributor itself or anyone acting on such Contributor's behalf.

Contributions do not include additions to the Program which: (i) are separate modules of software distributed in conjunction with the Program under their own license agreement, and (ii) are not derivative works of the Program.

"Contributor" means any person or entity that distributes the Program.

"Licensed Patents" mean patent claims licensable by a Contributor which are necessarily infringed by the use or sale of its Contribution alone or when combined with the Program.

"Program" means the Contributions distributed in accordance with this Agreement.

"Recipient" means anyone who receives the Program under this Agreement, including all Contributors.

2. GRANT OF RIGHTS

a) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free copyright license to reproduce, prepare derivative works of, publicly display, publicly perform, distribute and sublicense the Contribution of such Contributor, if any, and such derivative works, in source code and object code form.

b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in source code and object code form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.

c) Recipient understands that although each Contributor grants the licenses to its Contributions set forth herein, no assurances are provided by any Contributor that the Program does not infringe the patent or other intellectual property rights of any other entity. Each Contributor disclaims any liability to Recipient for claims brought by any other entity based on infringement of intellectual property rights or otherwise. As a condition to exercising the rights and licenses granted hereunder, each Recipient hereby assumes sole responsibility to secure any other intellectual property rights needed, if any. For example, if a third party patent license is required to allow Recipient to distribute the Program, it is Recipient's responsibility to acquire that license before distributing the Program.

d) Each Contributor represents that to its knowledge it has sufficient copyright rights in its Contribution, if any, to grant the copyright license set forth in this Agreement.

3. REQUIREMENTS

A Contributor may choose to distribute the Program in object code form under its own license agreement, provided that:

a) it complies with the terms and conditions of this Agreement; and

b) its license agreement:

i) effectively disclaims on behalf of all Contributors all warranties and conditions, express and implied, including warranties or conditions of title and non-infringement, and implied warranties or conditions of merchantability and fitness for a particular purpose;

ii) effectively excludes on behalf of all Contributors all liability for damages, including direct, indirect, special, incidental and consequential damages, such as lost profits;

iii) states that any provisions which differ from this Agreement are offered by that Contributor alone and not by any other party; and

iv) states that source code for the Program is available from such Contributor, and informs licensees how to obtain it in a reasonable manner on or through a medium customarily used for software exchange. When the Program is made available in source code form:

- a) it must be made available under this Agreement; and
- b) a copy of this Agreement must be included with each copy of the Program.

Contributors may not remove or alter any copyright notices contained within the Program.

Each Contributor must identify itself as the originator of its Contribution, if any, in a manner that reasonably allows subsequent Recipients to identify the originator of the Contribution.

4. COMMERCIAL DISTRIBUTION

Commercial distributors of software may accept certain responsibilities with respect to end users, business partners and the like. While this license is intended to facilitate the commercial use of the Program, the Contributor who includes the Program in a commercial product offering should do so in a manner which does not create potential liability for other Contributors. Therefore, if a Contributor includes the Program in a commercial product offering, such Contributor ("Commercial Contributor") hereby agrees to defend and indemnify every other Contributor ("Indemnified Contributor") against any losses, damages and costs (collectively "Losses") arising from claims, lawsuits and other legal actions brought by a third party against the Indemnified Contributor to the extent caused by the acts or omissions of such Commercial Contributor in connection with its distribution of the Program in a commercial product offering. The obligations in this section do not apply to any claims or Losses relating to any actual or alleged intellectual property infringement. In order to qualify, an Indemnified Contributor must: a) promptly notify the Commercial Contributor in writing of such claim, and b) allow the Commercial Contributor to control, and cooperate with the Commercial Contributor in, the defense and any related settlement negotiations. The Indemnified Contributor may participate in any such claim at its own expense.

For example, a Contributor might include the Program in a commercial product offering, Product X. That Contributor is then a Commercial Contributor. If that Commercial Contributor then makes performance claims, or offers warranties related to Product X, those performance claims and warranties are such Commercial Contributor's responsibility alone. Under this section, the Commercial Contributor would have to defend claims against the other Contributors related to those performance claims and warranties, and if a court requires any other Contributor to pay any damages as a result, the Commercial Contributor must pay those damages.

5. NO WARRANTY EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, THE PROGRAM IS PROVIDED ON AN "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, EITHER EXPRESS OR IMPLIED INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OR CONDITIONS OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Each Recipient is solely responsible for determining the appropriateness of using and distributing the Program and assumes all risks associated with its exercise of rights under this Agreement, including but not limited to the risks and costs of program errors, compliance with applicable laws, damage to or loss of data, programs or equipment, and unavailability or interruption of operations.

6. DISCLAIMER OF LIABILITY EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER RECIPIENT NOR ANY CONTRIBUTORS SHALL HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOST PROFITS), HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN

ANY WAY OUT OF THE USE OR DISTRIBUTION OF THE PROGRAM OR THE EXERCISE OF ANY RIGHTS GRANTED HEREUNDER, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

7. GENERAL If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement, and without further action by the parties hereto, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable. If Recipient institutes patent litigation against any entity (including a cross-claim or counterclaim in a lawsuit) alleging that the Program itself (excluding combinations of the Program with other software or hardware) infringes such Recipient's patent(s), then such Recipient's rights granted under Section 2(b) shall terminate as of the date such litigation is filed.

All Recipient's rights under this Agreement shall terminate if it fails to comply with any of the material terms or conditions of this Agreement and does not cure such failure in a reasonable period of time after becoming aware of such noncompliance. If all Recipient's rights under this Agreement terminate, Recipient agrees to cease use and distribution of the Program as soon as reasonably practicable. However, Recipient's obligations under this Agreement and any licenses granted by Recipient relating to the Program shall continue and survive.

Everyone is permitted to copy and distribute copies of this Agreement, but in order to avoid inconsistency the Agreement is copyrighted and may only be modified in the following manner. The Agreement Steward reserves the right to publish new versions (including revisions) of this Agreement from time to time. No one other than the Agreement Steward has the right to modify this Agreement. The Eclipse Foundation is the initial Agreement Steward. The Eclipse Foundation may assign the responsibility to serve as the Agreement Steward to a suitable separate entity. Each new version of the Agreement will be given a distinguishing version number. The Program (including Contributions) may always be distributed subject to the version of the Agreement under which it was received. In addition, after a new version of the Agreement is published, Contributor may elect to distribute the Program (including its Contributions) under the new version. Except as expressly stated in Sections 2(a) and 2(b) above, Recipient receives no rights or licenses to the intellectual property of any Contributor under this Agreement, whether expressly, by implication, estoppel or otherwise. All rights in the Program not expressly granted under this Agreement are reserved.

This Agreement is governed by the laws of the State of New York and the intellectual property laws of the United States of America. No party to this Agreement will bring a legal action under this Agreement more than one year after the cause of action arose. Each party waives its rights to a jury trial in any resulting litigation.

Python Software License

1. This LICENSE AGREEMENT is between the Python Software Foundation ("PSF"), and the Individual or Organization ("Licensee") accessing and otherwise using Python 3.9.6 software in source or binary form and its associated documentation.
2. Subject to the terms and conditions of this License Agreement, PSF hereby grants Licensee a nonexclusive, royalty-free, world-wide license to reproduce, analyze, test, perform and/or display publicly, prepare derivative works, distribute, and otherwise use Python 3.9.6 alone or in any derivative version, provided, however, that PSF's License Agreement and PSF's notice of copyright, i.e., "Copyright © 2001-2021 Python Software Foundation; All Rights Reserved" are retained in Python 3.9.6 alone or in any derivative version prepared by Licensee.

3. In the event Licensee prepares a derivative work that is based on or incorporates Python 3.9.6 or any part thereof, and wants to make the derivative work available to others as provided herein, then Licensee hereby agrees to include in any such work a brief summary of the changes made to Python 3.9.6.
4. PSF is making Python 3.9.6 available to Licensee on an "AS IS" basis. PSF MAKES NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED. BY WAY OF EXAMPLE, BUT NOT LIMITATION, PSF MAKES NO AND DISCLAIMS ANY REPRESENTATION OR WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OR THAT THE USE OF PYTHON 3.9.6 WILL NOT INFRINGE ANY THIRD PARTY RIGHTS.
5. PSF SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER USERS OF PYTHON 3.9.6 FOR ANY INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES OR LOSS AS A RESULT OF MODIFYING, DISTRIBUTING, OR OTHERWISE USING PYTHON 3.9.6, OR ANY DERIVATIVE THEREOF, EVEN IF ADVISED OF THE POSSIBILITY THEREOF.
6. This License Agreement will automatically terminate upon a material breach of its terms and conditions.
7. Nothing in this License Agreement shall be deemed to create any relationship of agency, partnership, or joint venture between PSF and Licensee. This License Agreement does not grant permission to use PSF trademarks or trade name in a trademark sense to endorse or promote products or services of Licensee, or any third party.
8. By copying, installing or otherwise using Python 3.9.6, Licensee agrees to be bound by the terms and conditions of this License Agreement.

COMMON DEVELOPMENT AND DISTRIBUTION LICENSE (CDDL) Version 1.1

1. Definitions.
 - 1.1. "Contributor" means each individual or entity that creates or contributes to the creation of Modifications.
 - 1.2. "Contributor Version" means the combination of the Original Software, prior Modifications used by a Contributor (if any), and the Modifications made by that particular Contributor.
 - 1.3. "Covered Software" means (a) the Original Software, or (b) Modifications, or (c) the combination of files containing Original Software with files containing Modifications, in each case including portions thereof.
 - 1.4. "Executable" means the Covered Software in any form other than Source Code.
 - 1.5. "Initial Developer" means the individual or entity that first makes Original Software available under this License.
 - 1.6. "Larger Work" means a work which combines Covered Software or

portions thereof with code not governed by the terms of this License.

1.7. "License" means this document.

1.8. "Licensable" means having the right to grant, to the maximum extent possible, whether at the time of the initial grant or subsequently acquired, any and all of the rights conveyed herein.

1.9. "Modifications" means the Source Code and Executable form of any of the following:

A. Any file that results from an addition to, deletion from or modification of the contents of a file containing Original Software or previous Modifications;

B. Any new file that contains any part of the Original Software or previous Modification; or

C. Any new file that is contributed or otherwise made available under the terms of this License.

1.10. "Original Software" means the Source Code and Executable form of computer software code that is originally released under this License.

1.11. "Patent Claims" means any patent claim(s), now owned or hereafter acquired, including without limitation, method, process, and apparatus claims, in any patent Licensable by grantor.

1.12. "Source Code" means (a) the common form of computer software code in which modifications are made and (b) associated documentation included in or with such code.

1.13. "You" (or "Your") means an individual or a legal entity exercising rights under, and complying with all of the terms of, this License. For legal entities, "You" includes any entity which controls, is controlled by, or is under common control with You. For purposes of this definition, "control" means (a) the power, direct or indirect, to cause the direction or management of such entity, whether by contract or otherwise, or (b) ownership of more than fifty percent (50%) of the outstanding shares or beneficial ownership of such entity.

2. License Grants.

2.1. The Initial Developer Grant.

Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, the Initial Developer hereby grants You a world-wide, royalty-free, non-exclusive license:

- (a) under intellectual property rights (other than patent or trademark) Licensable by Initial Developer, to use, reproduce, modify, display, perform, sublicense and distribute the Original Software (or portions thereof), with or without Modifications, and/or as part of a Larger Work; and
- (b) under Patent Claims infringed by the making, using or selling of Original Software, to make, have made, use, practice, sell, and offer for sale, and/or otherwise dispose of the Original Software (or portions thereof).
- (c) The licenses granted in Sections 2.1(a) and (b) are effective on the date Initial Developer first distributes or otherwise makes the Original Software available to a third party under the terms of this License.
- (d) Notwithstanding Section 2.1(b) above, no patent license is granted: (1) for code that You delete from the Original Software, or (2) for infringements caused by: (i) the modification of the Original Software, or (ii) the combination of the Original Software with other software or devices.

2.2. Contributor Grant.

Conditioned upon Your compliance with Section 3.1 below and subject to third party intellectual property claims, each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

- (a) under intellectual property rights (other than patent or trademark) Licensable by Contributor to use, reproduce, modify, display, perform, sublicense and distribute the Modifications created by such Contributor (or portions thereof), either on an unmodified basis, with other Modifications, as Covered Software and/or as part of a Larger Work; and
- (b) under Patent Claims infringed by the making, using, or selling

of Modifications made by that Contributor either alone and/or in combination with its Contributor Version (or portions of such combination), to make, use, sell, offer for sale, have made, and/or otherwise dispose of: (1) Modifications made by that Contributor (or portions thereof); and (2) the combination of Modifications made by that Contributor with its Contributor Version (or portions of such combination).

(c) The licenses granted in Sections 2.2(a) and 2.2(b) are effective on the date Contributor first distributes or otherwise makes the Modifications available to a third party.

(d) Notwithstanding Section 2.2(b) above, no patent license is granted: (1) for any code that Contributor has deleted from the Contributor Version; (2) for infringements caused by: (i) third party modifications of Contributor Version, or (ii) the combination of Modifications made by that Contributor with other software (except as part of the Contributor Version) or other devices; or (3) under Patent Claims infringed by Covered Software in the absence of Modifications made by that Contributor.

3. Distribution Obligations.

3.1. Availability of Source Code.

Any Covered Software that You distribute or otherwise make available in Executable form must also be made available in Source Code form and that Source Code form must be distributed only under the terms of this License. You must include a copy of this License with every copy of the Source Code form of the Covered Software You distribute or otherwise make available. You must inform recipients of any such Covered Software in Executable form as to how they can obtain such Covered Software in Source Code form in a reasonable manner on or through a medium customarily used for software exchange.

3.2. Modifications.

The Modifications that You create or to which You contribute are governed by the terms of this License. You represent that You believe Your Modifications are Your original creation(s) and/or You

have sufficient rights to grant the rights conveyed by this License.

3.3. Required Notices.

You must include a notice in each of Your Modifications that identifies You as the Contributor of the Modification. You may not remove or alter any copyright, patent or trademark notices contained within the Covered Software, or any notices of licensing or any descriptive text giving attribution to any Contributor or the Initial Developer.

3.4. Application of Additional Terms.

You may not offer or impose any terms on any Covered Software in Source Code form that alters or restricts the applicable version of this License or the recipients' rights hereunder. You may choose to offer, and to charge a fee for, warranty, support, indemnity or liability obligations to one or more recipients of Covered Software. However, you may do so only on Your own behalf, and not on behalf of the Initial Developer or any Contributor. You must make it absolutely clear that any such warranty, support, indemnity or liability obligation is offered by You alone, and You hereby agree to indemnify the Initial Developer and every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of warranty, support, indemnity or liability terms You offer.

3.5. Distribution of Executable Versions.

You may distribute the Executable form of the Covered Software under the terms of this License or under the terms of a license of Your choice, which may contain terms different from this License, provided that You are in compliance with the terms of this License and that the license for the Executable form does not attempt to limit or alter the recipient's rights in the Source Code form from the rights set forth in this License. If You distribute the Covered Software in Executable form under a different license, You must make it absolutely clear that any terms which differ from this License are offered by You alone, not by the Initial Developer or Contributor. You hereby agree to indemnify the Initial Developer and

every Contributor for any liability incurred by the Initial Developer or such Contributor as a result of any such terms You offer.

3.6. Larger Works.

You may create a Larger Work by combining Covered Software with other code not governed by the terms of this License and distribute the Larger Work as a single product. In such a case, You must make sure the requirements of this License are fulfilled for the Covered Software.

4. Versions of the License.

4.1. New Versions.

Oracle is the initial license steward and may publish revised and/or new versions of this License from time to time. Each version will be given a distinguishing version number. Except as provided in Section 4.3, no one other than the license steward has the right to modify this License.

4.2. Effect of New Versions.

You may always continue to use, distribute or otherwise make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. If the Initial Developer includes a notice in the Original Software prohibiting it from being distributed or otherwise made available under any subsequent version of the License, You must distribute and make the Covered Software available under the terms of the version of the License under which You originally received the Covered Software. Otherwise, You may also choose to use, distribute or otherwise make the Covered Software available under the terms of any subsequent version of the License published by the license steward.

4.3. Modified Versions.

When You are an Initial Developer and You want to create a new license for Your Original Software, You may create and use a modified version of this License if You: (a) rename the license and remove any references to the name of the license steward (except to note that the license differs from this License); and (b) otherwise

make it clear that the license contains terms which differ from this License.

5. DISCLAIMER OF WARRANTY.

COVERED SOFTWARE IS PROVIDED UNDER THIS LICENSE ON AN "AS IS" BASIS, WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES THAT THE COVERED SOFTWARE IS FREE OF DEFECTS, MERCHANTABLE, FIT FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE COVERED SOFTWARE IS WITH YOU. SHOULD ANY COVERED SOFTWARE PROVE

DEFECTIVE IN ANY RESPECT, YOU (NOT THE INITIAL DEVELOPER OR ANY OTHER CONTRIBUTOR) ASSUME THE COST OF ANY NECESSARY SERVICING, REPAIR OR CORRECTION. THIS DISCLAIMER OF WARRANTY CONSTITUTES AN ESSENTIAL PART OF THIS LICENSE. NO USE OF ANY COVERED SOFTWARE IS AUTHORIZED HEREUNDER EXCEPT UNDER THIS DISCLAIMER.

6. TERMINATION.

6.1. This License and the rights granted hereunder will terminate automatically if You fail to comply with terms herein and fail to cure such breach within 30 days of becoming aware of the breach. Provisions which, by their nature, must remain in effect beyond the termination of this License shall survive.

6.2. If You assert a patent infringement claim (excluding declaratory judgment actions) against Initial Developer or a Contributor (the Initial Developer or Contributor against whom You assert such claim is referred to as "Participant") alleging that the Participant Software (meaning the Contributor Version where the Participant is a Contributor or the Original Software where the Participant is the Initial Developer) directly or indirectly infringes any patent, then any and all rights granted directly or indirectly to You by such Participant, the Initial Developer (if the Initial Developer is not the Participant) and all Contributors under Sections 2.1 and/or 2.2 of this License shall, upon 60 days notice from Participant terminate prospectively and automatically at the expiration of such 60 day notice period, unless if within such 60

day period You withdraw Your claim with respect to the Participant Software against such Participant either unilaterally or pursuant to a written agreement with Participant.

6.3. If You assert a patent infringement claim against Participant alleging that the Participant Software directly or indirectly infringes any patent where such claim is resolved (such as by license or settlement) prior to the initiation of patent infringement litigation, then the reasonable value of the licenses granted by such Participant under Sections 2.1 or 2.2 shall be taken into account in determining the amount or value of any payment or license.

6.4. In the event of termination under Sections 6.1 or 6.2 above, all end user licenses that have been validly granted by You or any distributor hereunder prior to termination (excluding licenses granted to You by any distributor) shall survive termination.

7. LIMITATION OF LIABILITY.

UNDER NO CIRCUMSTANCES AND UNDER NO LEGAL THEORY, WHETHER TORT

(INCLUDING NEGLIGENCE), CONTRACT, OR OTHERWISE, SHALL YOU, THE INITIAL DEVELOPER, ANY OTHER CONTRIBUTOR, OR ANY DISTRIBUTOR OF COVERED SOFTWARE, OR ANY SUPPLIER OF ANY OF SUCH PARTIES, BE LIABLE

TO ANY PERSON FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY CHARACTER INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF GOODWILL, WORK STOPPAGE, COMPUTER

FAILURE OR MALFUNCTION, OR ANY AND ALL OTHER COMMERCIAL DAMAGES OR

LOSSES, EVEN IF SUCH PARTY SHALL HAVE BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION OF LIABILITY SHALL NOT APPLY TO LIABILITY FOR DEATH OR PERSONAL INJURY RESULTING FROM SUCH

PARTY'S NEGLIGENCE TO THE EXTENT APPLICABLE LAW PROHIBITS SUCH LIMITATION. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THIS EXCLUSION

AND LIMITATION MAY NOT APPLY TO YOU.

8. U.S. GOVERNMENT END USERS.

The Covered Software is a "commercial item," as that term is defined in 48 C.F.R. 2.101 (Oct. 1995), consisting of "commercial computer software" (as that term is defined at 48 C.F.R. § 252.227-7014(a)(1)) and "commercial computer software documentation" as such terms are used in 48 C.F.R. 12.212 (Sept. 1995). Consistent with 48 C.F.R. 12.212 and 48 C.F.R. 227.7202-1 through 227.7202-4 (June 1995), all U.S. Government End Users acquire Covered Software with only those rights set forth herein. This U.S. Government Rights clause is in lieu of, and supersedes, any other FAR, DFAR, or other clause or provision that addresses Government rights in computer software under this License.

9. MISCELLANEOUS.

This License represents the complete agreement concerning subject matter hereof. If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable. This License shall be governed by the law of the jurisdiction specified in a notice contained within the Original Software (except to the extent applicable law, if any, provides otherwise), excluding such jurisdiction's conflict-of-law provisions. Any litigation relating to this License shall be subject to the jurisdiction of the courts located in the jurisdiction and venue specified in a notice contained within the Original Software, with the losing party responsible for costs, including, without limitation, court costs and reasonable attorneys' fees and expenses. The application of the United Nations Convention on Contracts for the International Sale of Goods is expressly excluded. Any law or regulation which provides that the language of a contract shall be construed against the drafter shall not apply to this License. You agree that You alone are responsible for compliance with the United States export administration regulations (and the export control laws and regulation of any other countries) when You use, distribute

or otherwise make available any Covered Software.

10. RESPONSIBILITY FOR CLAIMS.

As between Initial Developer and the Contributors, each party is responsible for claims and damages arising, directly or indirectly, out of its utilization of rights under this License and You agree to work with Initial Developer and Contributors to distribute such responsibility on an equitable basis. Nothing herein is intended or shall be deemed to constitute any admission of liability.

NOTICE PURSUANT TO SECTION 9 OF THE COMMON DEVELOPMENT AND DISTRIBUTION

LICENSE (CDDL)

The code released under the CDDL shall be governed by the laws of the State of California (excluding conflict-of-law provisions). Any litigation relating to this License shall be subject to the jurisdiction of the Federal Courts of the Northern District of California and the state courts of the State of California, with venue lying in Santa Clara County, California.

The GNU General Public License (GPL) Version 2, June 1991

Copyright (C) 1989, 1991 Free Software Foundation, Inc.

51 Franklin Street, Fifth Floor

Boston, MA 02110-1335

USA

Everyone is permitted to copy and distribute verbatim copies of this license document, but changing it is not allowed.

Preamble

The licenses for most software are designed to take away your freedom to share and change it. By contrast, the GNU General Public License is intended to guarantee your freedom to share and change free software--to make sure the software is free for all its users. This General Public License applies to most of the Free Software Foundation's software and to any other program whose authors commit to using it. (Some other Free Software Foundation software is covered by the GNU Library General Public License instead.) You can apply it to your programs, too.

When we speak of free software, we are referring to freedom, not price.

Our General Public Licenses are designed to make sure that you have the freedom to distribute copies of free software (and charge for this service if you wish), that you receive source code or can get it if you want it, that you can change the software or use pieces of it in new free programs; and that you know you can do these things.

To protect your rights, we need to make restrictions that forbid anyone to deny you these rights or to ask you to surrender the rights. These restrictions translate to certain responsibilities for you if you distribute copies of the software, or if you modify it.

For example, if you distribute copies of such a program, whether gratis or for a fee, you must give the recipients all the rights that you have.

You must make sure that they, too, receive or can get the source code.

And you must show them these terms so they know their rights.

We protect your rights with two steps: (1) copyright the software, and (2) offer you this license which gives you legal permission to copy, distribute and/or modify the software.

Also, for each author's protection and ours, we want to make certain that everyone understands that there is no warranty for this free software. If the software is modified by someone else and passed on, we want its recipients to know that what they have is not the original, so that any problems introduced by others will not reflect on the original authors' reputations.

Finally, any free program is threatened constantly by software patents.

We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

The precise terms and conditions for copying, distribution and modification follow.

TERMS AND CONDITIONS FOR COPYING, DISTRIBUTION AND MODIFICATION

0. This License applies to any program or other work which contains a notice placed by the copyright holder saying it may be distributed under

the terms of this General Public License. The "Program", below, refers to any such program or work, and a "work based on the Program" means either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language. (Hereinafter, translation is included without limitation in the term "modification".) Each licensee is addressed as "you".

Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted, and the output from the Program is covered only if its contents constitute a work based on the Program (independent of having been made by running the Program). Whether that is true depends on what the Program does.

1. You may copy and distribute verbatim copies of the Program's source code as you receive it, in any medium, provided that you conspicuously and appropriately publish on each copy an appropriate copyright notice and disclaimer of warranty; keep intact all the notices that refer to this License and to the absence of any warranty; and give any other recipients of the Program a copy of this License along with the Program. You may charge a fee for the physical act of transferring a copy, and you may at your option offer warranty protection in exchange for a fee.
2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions:
 - a) You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.
 - b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.
 - c) If the modified program normally reads commands interactively when run, you must cause it, when started running for such

interactive use in the most ordinary way, to print or display an announcement including an appropriate copyright notice and a notice that there is no warranty (or else, saying that you provide a warranty) and that users may redistribute the program under these conditions, and telling the user how to view a copy of this License. (Exception: if the Program itself is interactive but does not normally print such an announcement, your work based on the Program is not required to print an announcement.)

These requirements apply to the modified work as a whole. If identifiable sections of that work are not derived from the Program, and can be reasonably considered independent and separate works in themselves, then this License, and its terms, do not apply to those sections when you distribute them as separate works. But when you distribute the same sections as part of a whole which is a work based on the Program, the distribution of the whole must be on the terms of this License, whose permissions for other licensees extend to the entire whole, and thus to each and every part regardless of who wrote it. Thus, it is not the intent of this section to claim rights or contest your rights to work written entirely by you; rather, the intent is to exercise the right to control the distribution of derivative or collective works based on the Program.

In addition, mere aggregation of another work not based on the Program with the Program (or with a work based on the Program) on a volume of a storage or distribution medium does not bring the other work under the scope of this License.

3. You may copy and distribute the Program (or a work based on it, under Section 2) in object code or executable form under the terms of Sections 1 and 2 above provided that you also do one of the following:

- a) Accompany it with the complete corresponding machine-readable source code, which must be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,
- b) Accompany it with a written offer, valid for at least three years, to give any third party, for a charge no more than your cost

of physically performing source distribution, a complete machine-readable copy of the corresponding source code, to be distributed under the terms of Sections 1 and 2 above on a medium customarily used for software interchange; or,

c) Accompany it with the information you received as to the offer to distribute corresponding source code. (This alternative is allowed only for noncommercial distribution and only if you received the program in object code or executable form with such an offer, in accord with Subsection b above.)

The source code for a work means the preferred form of the work for making modifications to it. For an executable work, complete source code means all the source code for all modules it contains, plus any associated interface definition files, plus the scripts used to control compilation and installation of the executable. However, as a special exception, the source code distributed need not include anything that is normally distributed (in either source or binary form) with the major components (compiler, kernel, and so on) of the operating system on which the executable runs, unless that component itself accompanies the executable.

If distribution of executable or object code is made by offering access to copy from a designated place, then offering equivalent access to copy the source code from the same place counts as distribution of the source code, even though third parties are not compelled to copy the source along with the object code.

4. You may not copy, modify, sublicense, or distribute the Program except as expressly provided under this License. Any attempt otherwise to copy, modify, sublicense or distribute the Program is void, and will automatically terminate your rights under this License. However, parties who have received copies, or rights, from you under this License will not have their licenses terminated so long as such parties remain in full compliance.

5. You are not required to accept this License, since you have not signed it. However, nothing else grants you permission to modify or

distribute the Program or its derivative works. These actions are prohibited by law if you do not accept this License. Therefore, by modifying or distributing the Program (or any work based on the Program), you indicate your acceptance of this License to do so, and all its terms and conditions for copying, distributing or modifying the Program or works based on it.

6. Each time you redistribute the Program (or any work based on the Program), the recipient automatically receives a license from the original licensor to copy, distribute or modify the Program subject to these terms and conditions. You may not impose any further restrictions on the recipients' exercise of the rights granted herein. You are not responsible for enforcing compliance by third parties to this License.

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

If any portion of this section is held invalid or unenforceable under any particular circumstance, the balance of the section is intended to apply and the section as a whole is intended to apply in other circumstances.

It is not the purpose of this section to induce you to infringe any patents or other property right claims or to contest validity of any such claims; this section has the sole purpose of protecting the integrity of the free software distribution system, which is implemented by public license practices. Many people have made generous

contributions to the wide range of software distributed through that system in reliance on consistent application of that system; it is up to the author/donor to decide if he or she is willing to distribute software through any other system and a licensee cannot impose that choice. This section is intended to make thoroughly clear what is believed to be a consequence of the rest of this License.

8. If the distribution and/or use of the Program is restricted in certain countries either by patents or by copyrighted interfaces, the original copyright holder who places the Program under this License may add an explicit geographical distribution limitation excluding those countries, so that distribution is permitted only in or among countries not thus excluded. In such case, this License incorporates the limitation as if written in the body of this License.

9. The Free Software Foundation may publish revised and/or new versions of the General Public License from time to time. Such new versions will be similar in spirit to the present version, but may differ in detail to address new problems or concerns.

Each version is given a distinguishing version number. If the Program specifies a version number of this License which applies to it and "any later version", you have the option of following the terms and conditions either of that version or of any later version published by the Free Software Foundation. If the Program does not specify a version number of this License, you may choose any version ever published by the Free Software Foundation.

10. If you wish to incorporate parts of the Program into other free programs whose distribution conditions are different, write to the author to ask for permission. For software which is copyrighted by the Free Software Foundation, write to the Free Software Foundation; we sometimes make exceptions for this. Our decision will be guided by the two goals of preserving the free status of all derivatives of our free software and of promoting the sharing and reuse of software generally.

NO WARRANTY

11. BECAUSE THE PROGRAM IS LICENSED FREE OF CHARGE, THERE IS NO

WARRANTY FOR THE PROGRAM, TO THE EXTENT PERMITTED BY APPLICABLE LAW.
EXCEPT WHEN OTHERWISE STATED IN WRITING THE COPYRIGHT HOLDERS AND/OR
OTHER PARTIES PROVIDE THE PROGRAM "AS IS" WITHOUT WARRANTY OF ANY
KIND,

EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED
WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
THE

ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH
YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU ASSUME THE COST OF ALL
NECESSARY SERVICING, REPAIR OR CORRECTION.

12. IN NO EVENT UNLESS REQUIRED BY APPLICABLE LAW OR AGREED TO IN
WRITING WILL ANY COPYRIGHT HOLDER, OR ANY OTHER PARTY WHO MAY MODIFY
AND/OR REDISTRIBUTE THE PROGRAM AS PERMITTED ABOVE, BE LIABLE TO YOU
FOR

DAMAGES, INCLUDING ANY GENERAL, SPECIAL, INCIDENTAL OR CONSEQUENTIAL
DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE PROGRAM
(INCLUDING BUT NOT LIMITED TO LOSS OF DATA OR DATA BEING RENDERED
INACCURATE OR LOSSES SUSTAINED BY YOU OR THIRD PARTIES OR A FAILURE OF
THE PROGRAM TO OPERATE WITH ANY OTHER PROGRAMS), EVEN IF SUCH
HOLDER OR

OTHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

END OF TERMS AND CONDITIONS

How to Apply These Terms to Your New Programs

If you develop a new program, and you want it to be of the greatest
possible use to the public, the best way to achieve this is to make it
free software which everyone can redistribute and change under these terms.

To do so, attach the following notices to the program. It is safest to
attach them to the start of each source file to most effectively convey
the exclusion of warranty; and each file should have at least the
"copyright" line and a pointer to where the full notice is found.

One line to give the program's name and a brief idea of what it does.

Copyright (C) <year> <name of author>

This program is free software; you can redistribute it and/or modify
it under the terms of the GNU General Public License as published by
the Free Software Foundation; either version 2 of the License, or

(at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program; if not, write to the Free Software Foundation, Inc., 51 Franklin Street, Fifth Floor, Boston, MA 02110-1335 USA

Also add information on how to contact you by electronic and paper mail.

If the program is interactive, make it output a short notice like this when it starts in an interactive mode:

Gnomovision version 69, Copyright (C) year name of author
Gnomovision comes with ABSOLUTELY NO WARRANTY; for details type `show w'. This is free software, and you are welcome to redistribute it under certain conditions; type `show c' for details.

The hypothetical commands `show w' and `show c' should show the appropriate parts of the General Public License. Of course, the commands you use may be called something other than `show w' and `show c'; they could even be mouse-clicks or menu items--whatever suits your program. You should also get your employer (if you work as a programmer) or your school, if any, to sign a "copyright disclaimer" for the program, if necessary. Here is a sample; alter the names:

Yoyodyne, Inc., hereby disclaims all copyright interest in the program `Gnomovision' (which makes passes at compilers) written by James Hacker.

signature of Ty Coon, 1 April 1989

Ty Coon, President of Vice

This General Public License does not permit incorporating your program into proprietary programs. If your program is a subroutine library, you may consider it more useful to permit linking proprietary applications with the library. If this is what you want to do, use the GNU Library General Public License instead of this License.

#

Certain source files distributed by Oracle America, Inc. and/or its affiliates are subject to the following clarification and special exception to the GPLv2, based on the GNU Project exception for its Classpath libraries, known as the GNU Classpath Exception, but only where Oracle has expressly included in the particular source file's header the words "Oracle designates this particular file as subject to the "Classpath" exception as provided by Oracle in the LICENSE file that accompanied this code."

You should also note that Oracle includes multiple, independent programs in this software package. Some of those programs are provided under licenses deemed incompatible with the GPLv2 by the Free Software Foundation and others. For example, the package includes programs licensed under the Apache License, Version 2.0. Such programs are licensed to you under their original licenses.

Oracle facilitates your further distribution of this package by adding the Classpath Exception to the necessary parts of its GPLv2 code, which permits you to use that code in combination with other independent modules not licensed under the GPLv2. However, note that this would not permit you to commingle code under an incompatible license with Oracle's GPLv2 licensed code by, for example, cutting and pasting such code into a file also containing Oracle's GPLv2 licensed code and then distributing the result. Additionally, if you were to remove the Classpath Exception from any of the files to which it applies and distribute the result, you would likely be required to license some or all of the other code in that distribution under the GPLv2 as well, and since the GPLv2 is incompatible with the license terms of some items included in the distribution by Oracle, removing the Classpath Exception could therefore effectively compromise your ability to further distribute the package.

Proceed with caution and we recommend that you obtain the advice of a lawyer skilled in open source matters before removing the Classpath Exception or making modifications to this package which may subsequently be redistributed and/or involve the use of third party

software.

CLASSPATH EXCEPTION

Linking this library statically or dynamically with other modules is making a combined work based on this library. Thus, the terms and conditions of the GNU General Public License version 2 cover the whole combination.

As a special exception, the copyright holders of this library give you permission to link this library with independent modules to produce an executable, regardless of the license terms of these independent modules, and to copy and distribute the resulting executable under terms of your choice, provided that you also meet, for each linked independent module, the terms and conditions of the license of that module. An independent module is a module which is not derived from or based on this library. If you modify this library, you may extend this exception to your version of the library, but you are not obligated to do so. If you do not wish to do so, delete this exception statement from your version.