Oracle® Big Data Appliance

Licensing Information User Manual Release 4 (4.9)

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Describes licensing and support for Oracle Big Data Appliance.



Oracle Big Data Appliance Licensing Information User Manual, Release 4 (4.9)

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Preface

This document identifies the licences for the software installed on Oracle Big Data Appliance.

Audience

This document is intended for all owners of Oracle Big Data 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=trs if you are hearing impaired.

Related Documents

For more information, see the Big Data documentation library at

http://www.oracle.com/technetwork/database/bigdata-appliance/
documentation/index.html

Oracle Big Data Appliance Software Licensing

Oracle Big Data Appliance is an engineered system optimized for acquiring, organizing, and analyzing big data. It combines optimized hardware components with new software solutions to deliver a complete big data solution.

This chapter describes the licensing and technical support of software installed on Oracle Big Data Appliance. It contains these topics:

- Big Data Appliance Software Installation
- Software Licensing

1.1 Big Data Appliance Software Installation

Oracle Big Data Appliance software is installed in two stages:

- Factory-Installed Image
- On-Site Software Installation

1.1.1 Factory-Installed Image

The Oracle Linux operating system and various configuration utilities are factoryinstalled on Oracle Big Data Appliance servers. Your license to use them is included with your purchase of the appliance.

1.1.2 On-Site Software Installation

An Oracle Customer Service Representative downloads all applications software for Oracle Big Data Appliance. Some of this software is included in the Oracle Big Data Appliance licensing agreement, while other software is licensed separately.

You must specify whether to install separately licensed and optional software components when completing the Oracle Big Data Appliance Configuration Generation Utility.

1.2 Software Licensing

The software downloaded to Oracle Big Data Appliance is protected by these licenses:

- **Included Software**
- Oracle Big Data SQL Licensing
- Oracle Big Data Connectors

- Oracle Big Data Spatial and Graph
- Separately Licensed Software
- Oracle Big Data Appliance Restrictions on Use as a Condition of Receiving Support

1.2.1 Included Software

This section summarizes the licensing and support of software included with your purchase of Oracle Big Data Appliance. The licenses are only for use of the software on Oracle Big Data Appliance. You cannot move or copy the software to another system.

Operating System

Software	License	Support
Oracle Linux	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems

Integrated Software

Software	License	Support
Cloudera's Distribution including Apache Hadoop	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
Cloudera BDR	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
Cloudera Impala	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
Cloudera Manager	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
Cloudera Navigator	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
Cloudera RTD	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
Cloudera Search	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
Apache Spark	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems

Software	License	Support
Apache Kafka	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems

Other Software

Software	License	Support
Java HotSpot Virtual Machine	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
MySQL Enterprise Edition	Restricted use ¹ See https:// downloads.mysql.com/ docs/licenses/mysqld-5.7- com-en.pdf for licenses for included third-party software.	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
Oracle NoSQL Database Community Edition	GNU Affero General Public License Version 3 (AGPLv3)	None.
Oracle R Distribution	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
Oracle Perfect Balance (Oracle software for Oracle Big Data Appliance)	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems
Oracle DataSource for Apache Hadoop, formerly known as Oracle Table Access for Hadoop (Oracle software for Oracle Big Data Appliance and Oracle Big Data Connectors)	Perpetual for life of hardware	Oracle Premier Support for Systems or Oracle Premier Support for Operating Systems

¹ See the Oracle Software License Agreement ("SLA") and Entitlement for Hardware Systems with Integrated Software Options

Note: The Oracle Big Data Appliance Enterprise Manager Plug-In can be installed and used on Oracle Big Data Appliance without additional licensing.

1.2.2 Oracle Big Data SQL Licensing

The licensing for Oracle Big Data SQL is separate from the licensing for other Oracle products.

When you purchase a license for Oracle Big Data SQL, note the following:

- A separate license must be procured per disk per Hadoop cluster.
- All nodes within the Hadoop cluster that runs Oracle Big Data SQL must be licensed.
- All disks within every node that is part of a cluster running Oracle Big Data SQL must be licensed. Partial licensing within a node is not available. All nodes in the cluster are included.
- Only the Hadoop cluster side (Oracle Big Data Appliance, or other) of an Oracle Big Data SQL installation is licensed and no additional license is required for the database server side.
- Oracle Copy to Hadoop licensing is included.
- Oracle Super Cluster is not included.

Third Party Licensing for Oracle Shell for Hadoop Loaders

Oracle Shell for Hadoop Loaders is included in the Oracle Big Data SQL installation bundle. The following are third-party projects contained in Oracle Shell for Hadoop Loaders.

- ANTLR 4.7
- Apache Commons Exec 1.3

Unless otherwise specifically noted, or as required under the terms of the third party license (e.g., LGPL), the licenses and statements herein, including all statements regarding Apache-licensed code, are intended as notices only.

1.2.3 Oracle Big Data Connectors

The licensing for Oracle Big Data Connectors is separate from Oracle Big Data Appliance. You can install Oracle Big Data Connectors on a Hadoop cluster configured on either Oracle Big Data Appliance or commodity hardware.

When you purchase a license for Oracle Big Data Connectors, that license includes all of the following components:

- Oracle Loader for Hadoop
- A restricted use license of Oracle Data Integrator Enterprise Edition
- Oracle R Advanced Analytics for Hadoop
- Oracle SQL Connector for Hadoop Distributed File System
- Oracle XQuery for Hadoop
- Oracle DataSource for Apache Hadoop (formerly named Oracle Table Access for Hadoop)

Oracle Big Data Connectors must be licensed for all processors of a Hadoop cluster. When Oracle Big Data Connectors is installed on a single Hadoop cluster, it must be licensed on all processors. When Oracle Big Data Connectors is installed on multiple Hadoop clusters, it must be licensed on all processors of the clusters where the connectors are used.

For example, you might configure Oracle Big Data Appliance with three, six-node Hadoop clusters:

- Cluster 1 uses the Oracle SQL Connector for HDFS component of Oracle Big Data Connectors.
- Cluster 2 uses the Oracle XQuery for Hadoop component of Oracle Big Data Connectors.
- Cluster 3 does not use any component of Oracle Big Data Connectors.

For this configuration, you must license Oracle Big Data Connectors for the processors on 12 nodes (clusters 1 and 2).

The individual components are available only as part of the Oracle Big Data Connectors license. The components are not licensed individually.

Restricted Use License: Oracle Data Integrator Enterprise Edition as part of Oracle Big Data Connectors is restricted for use on Oracle Big Data Appliance with Cloudera CDH targets or Oracle NoSQL Database targets residing on Oracle Big Data Appliance. Any usage of Oracle Data Integrator outside of Oracle Big Data Appliance requires a full license for Oracle Data Integrator Enterprise Edition.

1.2.4 Oracle Big Data Spatial and Graph

The licensing for Oracle Big Data Spatial and Graph is separate from Oracle Big Data Appliance. When you purchase a license for Oracle Big Data Spatial and Graph that license includes the following components:

- Spatial support for vector and raster services on Hadoop
- Property graph support for data access to Apache HBase and Oracle NoSQL Database with indexing, search, and parallel in-memory analytics services.
- Multimedia support for processing and analyzing video and image data in Hadoop.

The spatial, multimedia, and property graph components are available only as part of Oracle Big Data Spatial and Graph. The components are not licensed individually.

You can install Oracle Big Data Spatial and Graph on a Hadoop cluster configured on either Oracle Big Data Appliance or commodity hardware. Additionally, the property graph component can be installed on an Oracle NoSQL Database Enterprise Edition cluster or on Community Edition with Oracle NoSQL Database Community Support configured on Oracle Big Data Appliance or other supported hardware. The property graph component can also be installed on a non-Hadoop client system in order to access supported Hadoop and Oracle NoSQL Database clusters (with or without Hadoop) as database servers.

Oracle Big Data Spatial and Graph must be licensed for all processors of the Hadoop cluster and/or the Oracle NoSQL Database cluster on which it is installed. All processors of a client system must be licensed for Oracle Big Data Spatial and Graph as well.

For example, you might configure Oracle Big Data Appliance with two, six-node Hadoop clusters and one Oracle NoSQL Database cluster:

- Cluster 1 (Hadoop) uses the spatial services of Oracle Big Data Spatial and Graph.
- Cluster 2 (Hadoop) uses the property graph services of Oracle Big Data Spatial and Graph.

- Cluster 3 (Oracle NoSQL Database) uses the property graph services of Oracle Big Data Spatial and Graph.
- A client system also uses the property graph services of Oracle Big Data Spatial and Graph and accesses property graphs stored on Cluster 2 and/or Cluster 3.

For this configuration, you must license Oracle Big Data Spatial and Graph for the processors on 18 nodes (all three clusters) and on all processors of the client system.

Restricted Use: To read data from Oracle Database "Two Table Format" directly into the Oracle Big Data Spatial and Graph In-Memory Analyst (PGX) requires the following licenses:

1. Oracle Big Data Spatial and Graph license on an Oracle Big Data Appliance,

or,

2. Oracle Big Data Spatial and Graph license on another supported configuration and a license for the Oracle Spatial and Graph option on the Oracle Database Enterprise Edition system.

1.2.5 Separately Licensed Software

This software requires a separate license:

Oracle NoSQL Database Enterprise Edition

See http://docs.oracle.com/cd/E26161_02/html/AdminGuide/
thirdpartylicenses.html for licensing for included third-party software.

1.2.6 Oracle Big Data Appliance Restrictions on Use as a Condition of Receiving Support

This section describes the restrictions on use of and modification to Oracle Big Data Appliance hardware and software that are conditions of your receiving support for the Oracle Big Data Appliance. These restrictions help to maintain a supportable hardware/software platform. Violating these restrictions can result in the loss of warranty and support.

Be sure to read and understand the restrictions under each of these categories:

- Hardware modifications
- Firmware updates
- Oracle Linux modifications
- Third-party software
- Changes to CDH (Cloudera's Distribution including Apache Hadoop).

Contact Oracle Support if you have questions about these restrictions or about modifications to Oracle Big Data Appliance not discussed in this document.

Restrictions on Hardware Modifications and Replacements

Customers may not modify or replace Oracle Big Data Appliance hardware, with one exception. They may replace the Cisco Ethernet switch that controls the administrative

network. The replacement must provide Gigabit Ethernet and at least 48 ports. These are the options:

- 1U in-rack replacement in the Cisco 4948 slot
- 2U in-rack replacement with a TOR (Top Of Rack) switch that supports both 10 GbE (or 40 GbE) and 1 GbE. In racks without a KVM, the TOR can be installed in the empty slots 41 and 42. The Sun Network 10 GbE Switch 72p is recommended. Note that this particular substitution is not possible in Sun Fire X4270 M2-based racks, which have no empty slots.
- Out-of-rack connections from each node to an external switch or panel. The external device must provide two ports for each server node, plus one for each InfiniBand switch and PDU in the Oracle Big Data Appliance rack.

Oracle does not make any provision for these modifications in the Oracle Big Data Appliance Starter, Full, Factory Upgrade, or Field Upgrade rack configurations. Customers must provide their own replacement hardware, perform the replacement, and support the non-standard switch at their own expense

The Cisco 4948 switch has no purpose other than control of the administrative network and can be turned off and removed if replaced.

Restrictions on Firmware Updates

Oracle Big Data Appliance hardware consists of "managed" and "non-managed" components. Firmware levels of managed components are regulated through Mammoth patches and are under tighter control than non-managed components

Firmware Updates for Managed Components

In general, customers may not update the firmware of the following Oracle Big Data Appliance managed components:

- Each server's ILOM/BIOS
- InfiniBand host channel adapters (HCA)
- Disk controller host bus adapters (HBA)
- Hard drives (HDD)

Customers may update firmware ordinarily managed by Mammoth only in cases where the original component failed and was replaced. Customers can use the bdaupdatefw utility to bring the firmware level up to (but not beyond) the level of the original Oracle-supplied component. No other method is permitted.

See Also:

Oracle Big Data Appliance Owner's Guide for information about the **bdaupdatefw** utility

Firmware Updates for Non-Managed Components

Customers may update firmware not managed by Mammoth. This includes firmware for the following components:

- Cisco 4948 Ethernet switch (both IOS and firmware)
- InfiniBand switches

- Power Distribution Units (PDUs)
- KVM switch and keyboard, monitor, mouse as needed (Sun Fire X4270 M2-based rack only).

For PDUs and InfiniBand switches, check MOS (My Oracle Support) Document 1528190.1 for supported firmware versions.

Note: Ensure that InfiniBand firmware stays current with the officially-supported release levels provided in the MOS document 1528190.1.

Restrictions on Oracle Linux Modifications

- Customers may upgrade or update the Oracle Linux kernel, but the upgrade is
 restricted to a newer version of the same Oracle Linux UEK (Unbreakable
 Enterprise Kernel) that was shipped with the product. For example, in the case of
 the UEK2 kernel, updates to newer versions of UEK2 are acceptable. Customers
 must follow the update procedures provided in the document, How To Upgrade a
 Kernel on BDA V4.2 and Higher/V4.1 (Doc ID 2033797.1) in My Oracle Support.
- Customers may add official Oracle Linux modules. Oracle Big Data Appliance does not support installation of Linux modules from sources that are not official Oracle Linux repositories. Customers install modules from these sources at their own risk. In addition, Oracle cannot answer questions about such software (before or after installation), and cannot provide assistance if issues arise from installing and using it. If Oracle suspects that the cause of a failure is software from an unofficial source, then Oracle Support will refer the customer to the vendor of the software, or, may ask the customer to remove the software and then reproduce the failure without it.
- Customers may apply Oracle Linux patches obtained from official Oracle Linux sources. Customers are responsible for the application of Oracle Linux security fixes as well as any other available security fixes from official Oracle repositories. Go to MOS (My Oracle Support) for instructions.
- Changing the partition layout on disks of a node of an Oracle Big Data Appliance cluster is not supported.

For clarity, with respect to separate works, including without limitation those in the Operating System, Integrated Software or Integrated Software Options, that are licensed to you under open source or similar license terms, the restrictions set forth in this section are intended solely as conditions to Oracle's obligations to provide support to you and not as restrictions on your license rights to use such separate works.

Restrictions on Third-Party Software

Customers are responsible for supporting all software on Oracle Big Data Appliance that is not installed by Mammoth. On top of the Mammoth installation, customers may install third-party software that is not supported by Oracle (such as applications, application utilities, and services) with the same caveats that apply to Oracle Linux modifications – support for such software and the consequences of installing and using it are the responsibility of the customer. This includes customer add-ons to components that are installed by Mammoth. In addition, third-party software installed on Oracle Big Data Appliance must comply with the following restrictions:

Supports 64-bit Oracle Linux on Oracle Big Data Appliance.

- Is directly related to use of Oracle-supported "big data" software installed on the appliance, such as Cloudera's Distribution including Apache Hadoop (CDH) or Oracle NoSQL Database. Software packages that support the health of the system, such as data center monitoring tools, are also acceptable.
- Does not overwrite, update, replace, or invalidate Oracle Big Data Appliance software. See the documentation on the bdachecksw utility in the Oracle Big Data Appliance Owner's Guide for instructions on how to confirm post-installation integrity.
- Does not consume system resources to a degree that adversely affects the performance of Oracle Linux, CDH, or Oracle NoSQL Database.

Regarding Storage of Non-HDFS Data

Customers are not restricted from use of /uNN data partitions within nodes of a CDH cluster for their own non-HDFS data. However, the following caveats apply:

- Use of these partitions will reduce space available for HDFS data.
- These partitions are not mirrored or redundant. Any data stored is subject to data loss if a disk fails. This storage should be limited to non-HDFS data that is replicated or can be regenerated.
- Oracle recommends that you do not use /u01 and /u02 on the first three nodes of a cluster for heavy I/O workloads. These disks are used by critical HDFS and Zookeeper roles.

Regarding use of the Oracle Big Data Appliance MySQL Installation

The MySQL instance on Oracle Big Data Appliance is specifically intended for internal use by the appliance only. No support is provided for using it for other purposes and use of MySQL outside of the intended purpose may interfere with future updates to the software.

Restrictions on Changes to CDH

The following actions may interfere with CDH functionality and are therefore restricted.

- Moving CDH services from their Mammoth-installed locations.
 - Customers may not move CDH services from one server to another using Cloudera Manager or any other means. These services, such as NameNode and JobTracker, must remain on the servers where they were installed by the Mammoth utility. The one exception to this rule is a move to recover from a node failure. Customers may use Mammoth node migration to move CDH services in this case.
- Installing Oracle NoSQL Database on HDFS nodes
 - Customers may not de-allocate disk drives from HDFS for reallocation to Oracle NoSQL Database or for any other reason. Oracle does not support an installation of CDH where the HDFS drive configuration on the Oracle Big Data Appliance has been modified by the customer. For more details on installing Oracle NoSQL Database on HDFS nodes, contact Oracle Support.

Other Restrictions

- Customers may not connect USB devices to Oracle Big Data Appliance servers except for the purposes documented in the Oracle Big Data Appliance Owner's Guide.
- Network ports on Big Data Appliance servers may not connect to external non-Sun servers using the Fibre Channel over Ethernet (FCoE) protocol. However, NFS and iSCSI connections to external non-Sun servers are supported.
- Customers may not connect third-party switching devices to the InfiniBand network. Only switches supported in Oracle Engineered Systems may be connected to the InfiniBand network. If you are not sure that a switch meets this requirement, contact Oracle Support.

Third-Party Licenses

This chapter contains licensing information about third-party products installed on Oracle Big Data Appliance.

- Offer to Provide Source Code
- Java HotSpot Virtual Machine
- MySQL Database Enterprise Edition
- Oracle Integrated Lights Out Manager (ILOM)
- **Oracle Linux**
- Oracle NoSQL Database
- Puppet
- Oracle R Distribution
- **ROracle**
- Scala
- Sun Datacenter InfiniBand Switch 36
- Sun Network QDR InfiniBand Gateway

Software projects installed on Oracle Big Data Appliance that are not covered in the sections above may be covered under the additional licenses identified in this section.

2.1 Offer to Provide Source Code

For third-party technology that you receive from Oracle in binary form, which is licensed under an open source license that gives you the right to receive the source code for that binary, you may be able to obtain a copy of the applicable source code by visiting:

http://oss.oracle.com/systems-opensourcecode

The source code for some software components of Oracle Big Data Appliance is readily available at the locations identified in Table 2-1.

Table 2-1 Location of Source Code

Software	Source Code Location
Cloudera's Distribution including Apache Hadoop	All Oracle Big Data Appliance servers in directory /opt/oss/src/CDH/
Cloudera Manager	On all Oracle Big Data Appliance servers in directory /opt/oss/src/ClouderaMgr/
Java HotSpot Virtual Machine	On all Oracle Big Data Appliance servers in zip file /usr/java/< <i>JDK version</i> >/src.zip
MySQL Community Edition	http://dev.mysql.com/downloads/mysql/ MySQL Enterprise Edition is installed on Oracle Big Data Appliance. It is proprietary software protected by intellectual property laws. This link is to the source code for MySQL Community Edition, which is open source.
Open Source R	All Oracle Big Data Appliance servers in directory /opt/oss/src/OracleR/
Oracle Hardware Installation Assistant	http://oss.oracle.com/systems-opensourcecode/ Under Servers and Storage Systems, expand X86 Servers and Blades, and then select Sun Server X4-2, Sun Server X3-2, or Sun Fire X4270 M2 Server.
Oracle Integrated Lights Out Manager	http://oss.oracle.com/systems-opensourcecode/ Under Servers and Storage Systems, expand x86 Servers and Blades, and then select Oracle Server X6-2L, Oracle Server X5-2L, Oracle Server X4-2L, Oracle Server X5-2L, Sun Server X4-2, Sun Server X3-2, or Sun Fire X4270 M2 Server.
Oracle Linux	http://oss.oracle.com/ol6/ http://oss.oracle.com/ol5/
Puppet	On all Oracle Big Data Appliance servers in directory /opt/oss/src/puppet/
Sun Datacenter InfiniBand Switch 36	http://oss.oracle.com/systems-opensourcecode/ Expand Networking, and then select Sun Datacenter InfiniBand Switch 36.
Sun Network QDR InfiniBand Gateway	http://oss.oracle.com/systems-opensourcecode/ Expand Networking, and then select Sun Datacenter InfiniBand GW Switch.

If the source code for the technology was not provided with the binary or otherwise made available to you, you can also receive a copy of the source code on physical media by submitting a written request to:

Oracle America, Inc.

Attn: Associate General Counsel Development and Engineering Legal 500 Oracle Parkway, 10th Floor

Redwood Shores, CA 94065

Your request should include:

- The name of the component or binary file(s) for which you are requesting the source code
- The name and version number of the Oracle product
- The date you received the Oracle product
- Your name
- Your company name (if applicable)
- Your return mailing address and email
- A telephone number in the event we need to reach you.

We may charge you a fee to cover the cost of physical media and processing. Your request must be sent

- (i) within three (3) years of the date you received the Oracle product that included the component or binary file(s) that are the subject of your request, or
- (ii) in the case of code licensed under the GPL v3, for as long as Oracle offers spare parts or customer support for that product model.

2.2 Puppet

Puppet version 3.6.2 is licensed to you under the terms of the GPL v.2. and not under the terms of the Oracle license agreement.

2.3 Apache Licensed Code

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2.4 Apache License, Version 2.0

Version 2.0, January 2004

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"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.

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29 June 2007

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John Chambers
Peter Dalgaard
Seth Falcon
Robert Gentleman

Kurt Hornik

Stefano Iacus

Ross Ihaka

Friedrich Leisch

Uwe Ligges

Thomas Lumley

Martin Maechler

Duncan Murdoch

Paul Murrell

Martyn Plummer

Brian Ripley

Deepayan Sarkar

Duncan Temple Lang

Luke Tierney

Simon Urbanek

plus Heiner Schwarte up to October 1999 and Guido Masarotto up to June 2003.

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Current R-core members can be contacted via email to R-project.org with name made up by replacing spaces by dots in the name listed above.

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2.22 ROracle

This product is an open source package for R that allows R users to interact with an Oracle database. It was developed by an individual called David James. Oracle has taken over new development, maintenance, and all upgrade activity on this package.

ROracle is licensed under LGPL v.2 or later and not under the terms of your Oracle license agreement. For more information see:

http://cran.cnr.berkeley.edu/web/packages/ROracle/ROracle.pdf

2.23 Oracle NoSQL Database

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2.24 Scala

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Cloudera Third-Party Licenses

This chapter lists the third-party licenses for the Cloudera software installed on Oracle Big Data Appliance.

This chapter contains the following sections:

- Cloudera's Distribution including Apache Hadoop (CDH)
- Cloudera Manager

See Also:

Cloudera Third-Party Licenses at

http://www.cloudera.com/content/cloudera-content/clouderadocs/Licenses/Third-Party-Licenses/Third-Party-Licenses.html

3.1 Cloudera's Distribution including Apache Hadoop (CDH)

#unique_50/unique_50_Connect_42_GUID-1C5D257D-CD9C-4A84-8608-41E2D5F2AB2A lists the third-party licenses for CDH5 and associated Cloudera products.

Table 3-1 Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Apache Hadoop	Apache 2.0	http://hadoop.apache.org/
Chardet	LGPL v2.1+	https://github.com/ chardet/chardet/
Cobertura 1.9.4.1	GPL v2.0+	http://sourceforge.net/ projects/cobertura
Eclipse Icons	EPL v1.0	https://eclipse.org/
Eclipse JDT Core 1.0.500.v20120522-1651	EPL v1.0	https://eclipse.org/jdt/core/
Eclipse JDT Core 3.1.1	EPL v1.0	http://www.eclipse.org/jdt/
Eclipse JDT Core 3.8.3.v20130121-145325	EPL v1.0	https://eclipse.org/jdt/core/
Eclipse Jetty 7.6.0v20120127	Apache 2.0	http://www.eclipse.org/ jetty/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
enum 0.4.4	Python License	https://pypi.python.org/ pypi/enum/
GlassFish Jasper 2.1 API 6.1.4	CDDL v1.0	http://mirrors.ibiblio.org/ maven2/org/mortbay/jetty/ jsp-api-2.1
jaffl 0.5.1	LGPL v3.0	https://mvnrepository.com/ artifact/org.jruby.extras/ jaffl/0.5.1
Jamon 2.3.1	MPL v1.1	https://sourceforge.net/ projects/jamon/files/jamon/
Jamon 2013.12.28	MPL v2.0	https://sourceforge.net/ projects/jamon/files/jamon/
Java Server Pages 2.1	CDDL v1.0	http://www.oracle.com/ technetwork/java/ javaee/jsp/index.html
Java Servlet API 2.5	CDDL v1.0	http://www.oracle.com/ technetwork/java/index- jsp-135475.html
Java Servlet API 3.0	CDDL v1.1	http://www.oracle.com/ technetwork/java/index- jsp-135475.html
Java Transaction API 1.1	CDDL v1.0	http://www.oracle.com/ technetwork/java/javaee/ tech/jta-138684.html
JavaMail	CDDL v1.0	https://java.net/projects/ javamail/pages/Home
JavaMail API 1.4.1	CDDL v1.0	https:// glassfish.dev.java.net/ javaee5/mail/
JAXB	CDDL v1.0	https://jaxb.dev.java.net/
JDiff 1.1.1	LGPL v2.1	https://sourceforge.net/ projects/javadiff/? source=typ_redirect
Jersey 1.14	CDDL v1.1	https://jersey.java.net/
Jersey 1.9	CDDL v1.1	https://jersey.java.net/
jffi 1.0.1	LGPL v3.0	https://github.com/jnr/jffi/ tree/1.0.1
jnr-netdb 0.4	LGPL v3.0	https://github.com/jnr/jnr-netdb/tree/0.4

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
JRuby	CPL v1.0	https://github.com/jruby/ jruby
JUnit 4.10	CPL v1.0	http://www.junit.org
JUnit 4.11	CPL v1.0	http://www.junit.org
JUnit 4.12	EPL v1.0	http://www.junit.org
lxml 3.3.6	BSD-3	http://lxml.de/
MarkdownTester	BSD 3	http://daringfireball.net/ projects/markdown/
Morfologik	BSD-3	https://github.com/ morfologik/morfologik- stemming
MySQL for Python 1.2.5	MIT	https://sourceforge.net/ projects/mysql-python/
nose 1.1.2	LGPL v2.1+	https://pypi.python.org/ pypi/nose/1.1.2
ocaml-make	LGPL v2.1	https:// web.archive.org/web/ 20111012162736/http:// www.ocaml.info/home/ ocaml_sources.html
Package ODF	LGPL v2.1+	Similar code can be located at https://github.com/sholo/Mejorandola/tree/master/Profesional%20de%20BackEnd/1.%20Introduccion%20a%20Python%20y%20Django/Sfoti.py/venv/Lib/sitepackages/tablib/packages/odf3
Paramiko 1.15.2	LGPL v2.1	https://github.com/ paramiko/paramiko/
python-daemon 1.5.1	Python License	http://pypi.python.org/ pypi/python-daemon/
pyXLWriter	LGPL v2.1+	https://pypi.python.org/ pypi/pyXLWriter
robotparser.py	Python License	http://svn.python.org/ projects/python/branches/ release22-maint/Lib/ robotparser.py
static	LGPL v2.1+	https://pypi.python.org/ pypi/static/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Wadl-resourcedoc-doclet 1.4	CDDL v1.1	http://mirrors.ibiblio.org/ maven2/com/sun/jersey/ contribs/wadl-resourcedoc- doclet
Highly Scalable Java 1.1.1	Public Domain	http://mirrors.ibiblio.org/ maven2/com/github/ stephenc/high-scale-lib/ high-scale-lib
Jython 2.5.3	Jython License	http://www.jython.org/
PyCrypto 2.6.1	Public Domain	http://www.pycrypto.org/
python-ldap 2.3.13	Python-Style	http://www.python-ldap.org/
pytz 2015.2	MIT	http://pythonhosted.org/ pytz/
unittest2	Python License	http://pydoc.net/Python/ unittest2/0.4.2/unittest2/
util.py Zope testing file	Zope Public License v2.1	https://github.com/python- zk/kazoo/blob/master/ kazoo/tests/util.py
zExceptions.ExceptionFormat ter from Zope	Zope Public License v2.0	https://github.com/ zopefoundation/ zExceptions/blob/ master/src/zExceptions/ ExceptionFormatter.py
Ace	BSD-3	https://github.com/ ajaxorg/ace
Ant Contrib 1.0	Apache 2.0	http://ant-contrib.sourceforge.net/
Ant Eclipse 1.0	Apache 2.0	http://ant-eclipse.sourceforge.net/
ANTLR 2.7.7	ANTLR 2 License	http://www.antlr2.org/
ANTLR 3.4	BSD-3	http://www.antlr.org/
ANTLR ST4 4.0.4 4.0.4	BSD-3	http:// www.stringtemplate.org
AOP Alliance 1.0	Public Domain	http://aopalliance.sourceforge.net/
Apache Accumulo 1.6.0	Apache 2.0	https://github.com/apache/accumulo
Apache Ant	Apache 2.0	http://ant.apache.org/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Apache Avro	Apache 2.0	http://avro.apache.org
Apache Calcite 1.0.0	Apache 2.0	https://github.com/apache/ calcite/tree/branch-1.0
Apache Commons BeanUtils 1.8.0	Apache 2.0	http:// commons.apache.org/ proper/commons-beanutils/
Apache Commons BeanUtils 1.9.2	Apache 2.0	http:// commons.apache.org/ proper/commons-beanutils/
Apache Commons CLI 1.2	Apache 2.0	http:// commons.apache.org/ proper/commons-cli/
Apache Commons Codec	Apache 2.0	http:// commons.apache.org/ proper/commons-digester/
Apache Commons Collections	Apache 2.0	http:// commons.apache.org/ proper/commons- collections/
Apache Commons Compress 1.4.1	Apache 2.0	http:// commons.apache.org/ proper/commons-compress/
Apache Commons Configuration 1.6	Apache 2.0	http:// commons.apache.org/ proper/commons- configuration/
Apache Commons Daemon 1.0.10	Apache 2.0	https:// commons.apache.org/ proper/commons-daemon/
Apache Commons Daemon 1.0.13	Apache 2.0	http:// commons.apache.org/ daemon/
Apache Commons Daemon 1.0.15	Apache 2.0	http:// commons.apache.org/ daemon/
Apache Commons Daemon 1.0.3	Apache 2.0	http:// commons.apache.org/ daemon/
Apache Commons DBCP 1.4	Apache 2.0	http:// commons.apache.org/ proper/commons-dbcp/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Apache Commons Digester 1.8	Apache 2.0	http:// commons.apache.org/ proper/commons-digester/
Apache Commons EL 1.0	Apache 1.1	http:// commons.apache.org/ proper/commons-el/
Apache Commons Exec 1.1	Apache 2.0	http://commons.apache.org/exec/
Apache Commons FileUpload 1.3.1	Apache 2.0	http:// commons.apache.org/ proper/commons- fileupload/
Apache Commons HttpClient 3.1	Apache 2.0	http://hc.apache.org/ httpclient-3.x/
Apache Commons IO 2.4	Apache 2.0	http:// commons.apache.org/ proper/commons-io/
Apache Commons Lang 2.6	Apache 2.0	http:// commons.apache.org/ proper/commons-lang/
Apache Commons Lang 3.1	Apache 2.0	http:// commons.apache.org/ proper/commons-lang/
Apache Commons Logging	Apache 2.0	http:// commons.apache.org/ logging http:// commons.apache.org/ logging/ http:// commons.apache.org/ proper/commons-logging/
Apache Commons Math 2.1	Apache 2.0	http:// commons.apache.org/math/
Apache Commons Math 3.1.1	Apache 2.0	http:// commons.apache.org/ math/ http:// commons.apache.org/ proper/commons-math/
Apache Commons Net 3.1	Apache 2.0	http:// commons.apache.org/ net/ http:// commons.apache.org/ proper/commons-net/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Apache Commons Pool	Apache 2.0	http://jakarta.apache.org/ commons/pool/ http:// mirrors.ibiblio.org/maven2/ commons-pool/commons- pool http:// mirrors.ibiblio.org/maven2/ commons-pool/commons- pool
Apache Commons VFS2 2.0	Apache 2.0	http:// commons.apache.org/ proper/commons-vfs/
Apache Crunch	Apache 2.0	https://crunch.apache.org/
Apache Curator	Apache 2.0	http://curator.apache.org/
Apache Curator 2.5.0	Apache 2.0	https://github.com/apache/ curator/tree/apache- curator-2.5.0
Apache DataFu 1.1.0	Apache 2.0	https:// datafu.incubator.apache.org/
Apache Derby	Apache 2.0	https://db.apache.org/ derby/
Apache Directory LDAP API 1.0.0-M20	Apache 2.0	http:// directory.apache.org/api/ gen-docs/1.0.0-M32/ apidocs/
Apache Extras for Apache Log4j	Apache 2.0	https://logging.apache.org/ log4j/extras/
Apache Flume	Apache 2.0	https://flume.apache.org/
Apache FTPLet API 1.0.0	Apache 2.0	https://mina.apache.org/ ftpserver-project/ftplet.html
Apache Geronimo Specs	Apache 2.0	https://github.com/apache/ geronimo-specs
Apache Groovy	Apache 2.0	http://www.groovy- lang.org/
Apache Hadoop Examples	Apache 2.0	http://www.cloudera.com/developers/get-started-with-hadoop-tutorial.html
Apache HBase	Apache 2.0	https://hbase.apache.org/
Apache Hive	Apache 2.0	https://hive.apache.org/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Apache HttpClient 3.0.1	Apache 2.0	http://jakarta.apache.org/ commons/ httpclient/ http:// jakarta.apache.org/ httpcomponents/ httpclient-3.x/
Apache HttpClient 4.2.5	Apache 2.0	http://hc.apache.org/ httpcomponents-client
Apache HttpCore 4.2.5	Apache 2.0	http://hc.apache.org/ httpcomponents-core-ga
Apache HttpMime 4.2.5	Apache 2.0	http://hc.apache.org/ httpcomponents-client
Apache Incubator HTrace 3.2.0	Apache 2.0	https://github.com/apache/incubator-htrace/tree/rel/3.2
Apache Ivy 2.2.0	Apache 2.0	http://ant.apache.org/ivy/
Apache Jakarta ORO 2.0.8	Apache 1.1	http:// jakarta.apache.org/oro/
Apache Jasper Runtime 5.5.23	Apache 2.0	https://tomcat.apache.org/ tomcat-4.1-doc/jasper- howto.html
Apache Java Data Objects 3.0.1	Apache 2.0	http://db.apache.org/jdo
Apache Log4j 1.2.15	Apache 2.0	http:// www.logging.apache.org/ log4j/
Apache Log4j 1.2.16	Apache 2.0	http:// www.logging.apache.org/ log4j/
Apache Log4j 1.2.17	Apache 2.0	http:// www.logging.apache.org/ log4j/
Apache Log4j 1.2.9	Apache 1.1	http:// www.logging.apache.org/ log4j/
Apache Lucene Core 4.10.3	Apache 2.0	https://lucene.apache.org/
Apache Mahout	Apache 2.0	http://mahout.apache.org/
Apache Mavibot 1.0.0-M1	Apache 2.0	http://directory.apache.org/ mavibot/
Apache MINA	Apache 2.0	https://mina.apache.org/ downloads-mina.html

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Apache Oozie	Apache 2.0	http://oozie.apache.org/
Apache Parquet	Apache 2.0	https://parquet.apache.org/
Apache Pig 0.12.0	Apache 2.0	https://pig.apache.org/
Apache Sentry 1.5.1	Apache 2.0	http://sentry.apache.org/
Apache Shiro Core 1.2.3	Apache 2.0	http://shiro.apache.org/
Apache Solr 4.10.3	Apache 2.0	http://lucene.apache.org/ solr/
Apache Spark	Apache 2.0	https://github.com/apache/ spark/
Apache Sqoop	Apache 2.0	http://sqoop.apache.org/
Apache Standard Taglib Implementation 1.2.5	Apache 2.0	https://tomcat.apache.org/ taglibs/standard/
Apache Thrift	Apache 2.0	https://thrift.apache.org/
Apache Thrift 0.9.0	Apache 2.0	http://thrift.apache.org
Apache Thrift 0.9.3	Apache 2.0	https://thrift.apache.org/
Apache Tomcat 6.0	Apache 2.0	http://tomcat.apache.org/
Apache Velocity 1.5	Apache 2.0	http://velocity.apache.org
Apache Velocity 1.7	Apache 2.0	http://velocity.apache.org/ engine/releases/ velocity-1.5/ http:// velocity.apache.org/engine/ devel/ http:// velocity.apache.org/engine/ releases/velocity-1.6.1/ http://velocity.apache.org/ engine/releases/ velocity-1.6.2/
Apache Whirr	Apache 2.0	https://github.com/apache/ whirr
Apache Xerces Java Parser 2.9.1	Apache 2.0	http://xerces.apache.org/ xerces2-j http:// xerces.apache.org/xerces2-j/
Apache Xerces2-J 1.4.2	Apache 1.1	https://github.com/apache/ xerces2-j/tree/Xerces- J_1_4_2
Apache XML Commons External Components XML APIs	Apache 2.0	http://xml.apache.org/ commons/#external http:// xml.apache.org/commons/ components/external/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
ApacheDS 2.0.0-M15	Apache 2.0	http://directory.apache.org/apacheds/
ASM 3.0	BSD-3	http://asm.ow2.org/
ASM 3.1	BSD-3	http://asm.ow2.org/
ASM 3.2	BSD-3	http://asm.ow2.org/
ASM 4.1	BSD-3	http://asm.ow2.org/
atinject 1	Apache 2.0	http://code.google.com/p/ atinject/
AWS SDK for Java 1.10.6	Apache 2.0	https://github.com/aws/ aws-sdk-java/tree/1.10.60
Babel 0.9.6	BSD-3	http://babel.pocoo.org/en/ latest/
BoneCP :: Core Library	Apache 2.0	http://mirrors.ibiblio.org/ maven2/com/jolbox/bonecp
Bootstrap	Apache 2.0	https://github.com/twbs/bootstrap/tree/v2.3.2
boto 2.42.0	MIT	https://github.com/boto/ boto
boto3 1.2.3	Apache 2.0	https://github.com/boto/ boto3
botocore 1.3.30	Apache 2.0	https://github.com/boto/ botocore
Bouncy Castle Crypto	MIT	http:// www.bouncycastle.org/
Castle.Core 3.2.0	Apache 2.0	https://www.nuget.org/ packages/Castle.Core
Cloudera Hue 3.9.0	Apache 2.0	http://gethue.com/
Cloudera Impala	Apache 2.0	https://github.com/ cloudera/Impala/tree/cdh5- trunk/common/thrift
Cloudera Llama	Apache 2.0	https://github.com/ cloudera/llama
Cloudera Log Redactor 1.0.3	Apache 2.0	https://github.com/ cloudera/logredactor/tree/ 1.0.3
Cloudera Search	Apache 2.0	https://github.com/ cloudera/search

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Code from Java Tutorials Article, "Java Language Keywords"	BSD-3	http://docs.oracle.com/ javase/tutorial/java/ nutsandbolts/ _keywords.html
Commons Compiler 2.7.6	BSD-3	https:// web.archive.org/web/ 20130306142357/http:// docs.codehaus.org/display/ JANINO/Home
ConcurrentLinkedHashMap 1.2	Apache 2.0	http://code.google.com/p/ concurrentlinkedhashmap/
ConfigObj 4.6.0	BSD-3	http:// www.voidspace.org.uk/ python/configobj.html
Cyrus SASL 2.1.23	BSD-style	http:// cyrusimap.org/ftp:// ftp.andrew.cmu.edu/pub/ cyrus-mail/
D3.js 3.4.6	BSD-3	https://github.com/d3/d3
DataNucleus Core	Apache 2.0	http:// www.datanucleus.org/
DataNucleus JDO API	Apache 2.0	http:// www.datanucleus.org/
DataNucleus RDBMS 3.2.12	Apache 2.0	http:// www.datanucleus.org/ products/datanucleus/ datastores/rdbms.html
DataTables 1.10.12	MIT	https://datatables.net/
DataTables 1.10.7	MIT	https://www.nuget.org/ packages/jquery.datatables
Django 1.6.10	BSD-3	https://github.com/django/django/tree/1.6.1
DOM4J 1.6.1	DOM4J License	http://dom4j.sourceforge.net
Eclipse Jetty 7.6.16v20140903	Apache 2.0	http://www.eclipse.org/ jetty/
Ehcache 2.4.4	Apache 2.0	http://ehcache.org
eigenbase-properties 1.1.4	Apache 2.0	https://github.com/ julianhyde/eigenbase- properties/tree/eigenbase- properties-1.1.4

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
ElementTree 1.2.6-20050316	MIT	http://effbot.org/zone/ element.htm
Findbugs Annotations 1.3.9-1	Apache 2.0	http://stephenc.github.com/findbugs-annotations
flot	MIT	https://www.nuget.org/ packages/flot
Google Guice 3.0	Apache 2.0	https://github.com/google/guice
Google Protocol Buffers 2.5.0	BSD-3	http://code.google.com/p/ protobuf https:// developers.google.com/ protocol-buffers/
Google-code-prettify	Apache 2.0	https://www.nuget.org/ packages/Prettify
GSON 2.2.4	Apache 2.0	https://github.com/ google/gso
Guava Libraries 11.0.2	Apache 2.0	https://github.com/google/guava
Guava Libraries 12.0.1	Apache 2.0	https://github.com/google/guava
Guava Libraries 14.0.1	Apache 2.0	https://github.com/google/guava
Hamcrest 1.1	BSD-3	http://code.google.com/p/ hamcrest/
Hamcrest 1.3	BSD-3	http://code.google.com/p/ hamcrest/
HBase Indexer	Apache 2.0	https://github.com/ NGDATA/hbase-indexer
Highlight.js	BSD-3	https://highlightjs.org/
HPPC Collections 0.5.2	Apache 2.0	http://mirrors.ibiblio.org/ maven2/com/carrotsearch/ hppc
HSQLDB Database 2.0.0	BSD-3	http://hsqldb.org/
HTrace	Apache 2.0	http://hsqldb.org/
HSQLDB Database 1.8.0.10	BSD-3	http:// incubator.apache.org/ projects/htrace.html
httplib2 0.8	MIT	https://pypi.python.org/ pypi/httplib2

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Jackson 1.8.8	Apache 2.0	http://jackson.codehaus.org
Jackson Annotations	Apache 2.0	http://wiki.fasterxml.com/ JacksonHome
Jackson Core 2.2.2	Apache 2.0	https://github.com/ FasterXML/jackson-core/ tree/jackson-core-2.2.2
Jackson Databind	Apache 2.0	http://wiki.fasterxml.com/ JacksonHome
Jackson JSON Processor 1.9.2	Apache 2.0	http:// jackson.codehaus.org/
Janino 2.7.6	BSD-3	https:// web.archive.org/web/ 20061124042504/http:// www.janino.net/
Jansson	MIT	https://github.com/ akheron/jansson
Jar Jar Links 1.1	Apache 2.0	http:// jarjar.googlecode.com/
Java Concurrency in Practice	CC BY 2.5	http://jcip.net/
Java Toaster 1.0.4	Apache 2.0	https://sourceforge.net/ projects/jtoaster/? source=navbar
java-xmlbuilder 0.4	Apache 2.0	http://code.google.com/p/ java-xmlbuilder/
JCodings 1.0.8	MIT	https://github.com/jruby/ jcodings
JCommander 1.32	Apache 2.0	https://github.com/cbeust/ jcommander/tree/ jcommander-1.32
Jets3t 0.6.1	Apache 2.0	http://www.jets3t.org/
Jets3t 0.9.0	Apache 2.0	http://www.jets3t.org/
Jettison 1.1	Apache 2.0	https://github.com/ codehaus/jettison
Jettison 1.3.3	Apache 2.0	http://mirrors.ibiblio.org/ maven2/org/codehaus/ jettison/jettison
Jetty 6.1.14	Apache 2.0	http://www.eclipse.org/ jetty/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Jetty 6.1.26	Apache 2.0	http://www.eclipse.org/ jetty/
JLine 0.9.94	BSD-3	http://jline.sourceforge.net/
JLine 2.11	BSD-3	http:// jline.sourceforge.net http:// mirrors.ibiblio.org/maven2/ jline/jline
JLine 2.12	BSD-3	http:// jline.sourceforge.net http:// mirrors.ibiblio.org/maven2/ jline/jline
Joda-Time	Apache 2.0	http://joda- time.sourceforge.net/
Joni 2.1.2	MIT	https://github.com/jruby/ joni/tree/2.1.2
jpam 1.1	Apache 2.0	https://sourceforge.net/ projects/jpam/
jQuery	MIT	http://jquery.com/
jQuery UI	MIT	https://github.com/jquery/ jquery-ui/tree/1.11.1
JSch 0.1.42	BSD-3	http://www.jcraft.com/ jsch/
Json.NET 3.5.8	MIT	https://www.nuget.org/ packages/Newtonsoft.Json
JSON.simple 1.1	Apache 2.0	http://code.google.com/p/ json-simple/
JSR305 Implementation in FindBugs	BSD-3	http:// findbugs.sourceforge.net/
JZlib	BSD-3	http://www.jcraft.com/ jzlib/
kazoo 2.0	Apache 2.0	https:// kazoo.readthedocs.io/en/ latest/
Kite 1.0.0	Apache 2.0	http://kitesdk.org/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Kosmos 0.2.2	Apache 2.0	http://highscalability.com/ kosmos-file-system-kfs-new- high-end-google-file-system- option https:// sourceforge.net/projects/ kosmosfs/http:// www.skrenta.com/2007/09/ kosmix_releases_google_gfs_ wor.html
Less.js 1.7.0	Apache 2.0	https://github.com/less/ less.js
LevelDB JNI	BSD-3	https://github.com/ fusesource/leveldbjni
LibTomCrypt	Public Domain	http://www.libtom.org/ LibTomCrypt/
LMAX Disruptor 3.3.0	Apache 2.0	http://lmax- exchange.github.com/ disruptor
Log Redactor	Apache 2.0	https://github.com/ cloudera/logredactor
log4net 1.2.10	Apache 2.0	http://logging.apache.org/ log4net/
Maven SCM 1.4	Apache 2.0	http://maven.apache.org/ components/scm/
Metrics Core Library	Apache 2.0	https://github.com/ dropwizard/metrics
Microsoft Azure Storage SDK for Java 0.6.0	Apache 2.0	https://github.com/Azure/ azure-storage-java
Mockito 1.8.5	MIT	http:// mockito.goolecode.com http: //www.mockito.org
Mockito 1.9.5	MIT	http:// mockito.goolecode.com http: //www.mockito.org
Noggit 0.5	Apache 2.0	http://noggit.org
NUnit 2.5.7.10213	MIT	https://www.nuget.org/ packages/NUnit
opencsv 2.3	Apache 2.0	http://opencsv.sf.net
OpenLDAP 2.4.25	OpenLDAP License	http://www.openldap.org/
ParaNamer 2.3	BSD-3	https://github.com/paul- hammant/paranamer

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Paste 2.0.1	MIT	http://pythonpaste.org
Pentaho Aggdesigner Algorithm 5.1.5-jhyde	Apache 2.0	https://sourceforge.net/ projects/pentaho/
Plexus Common Utilities 1.5.6	Apache 2.0	http://plexus.codehaus.org/ plexus-utils
PostgreSQL JDBC Driver 9.0	BSD-3	http://jdbc.postgresql.org/
Py4J 0.9	BSD-3	https://www.py4j.org/
pyAntTasks 1.3	Apache 2.0	https://code.google.com/ archive/p/pyanttasks/
pyOpenSSL 0.13	Apache 2.0	http:// pyopenssl.sourceforge.net/
Python OpenID	Apache 2.0	https://github.com/openid/ python-openid
Randomized Testing 2.1.6	Apache 2.0	https://github.com/ randomizedtesting/ randomizedtesting/tree/ release/2.1.6
rapidjson 0.11.0	MIT	https://github.com/ miloyip/rapidjson/
Regexp 1.3	Apache 1.1	http://jakarta.apache.org/ regexp/
Requests	Apache 2.0	https://github.com/ kennethreitz/requests/
RequireJS	MIT	https://github.com/ requirejs/requirejs
Roboto Font	Apache 2.0	https://fonts.google.com/ specimen/Roboto
Serpent S Boxes	Serpent S Boxes License	http:// web.archive.org/web/ 20080415214327/http:// fp.gladman.plus.com/ cryptography_technology/ aesr1/f_box.h
Simplejson 2.1.2	MIT	https://pypi.python.org/ pypi/simplejson/2.1.2
Sizzle	MIT	http://sizzlejs.com
SLF4J 1.6.1	MIT	http://www.slf4j.org/
SLF4J 1.7.5	MIT	http://www.slf4j.org/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
Snappy for C++ 1.1.1.7	BSD-3	https://www.nuget.org/ packages/Snappy
snappy-java 1.0.4.1	Apache 2.0	http://xerial.org/snappy- java/
Snowball	BSD-3	http://snowballstem.org/
Spatial4J 0.4.1	Apache 2.0	https://github.com/ locationtech/spatial4j/tree/ spatial4j-0.4.1
StAX API 1.0.1	Apache 2.0	http://stax.codehaus.org/
StringTemplate 3.2.1	BSD-3	http:// www.stringtemplate.org/
Super CSV 2.2.0	Apache 2.0	https://github.com/super-csv/super-csv/tree/v2.2.0
Tablib 0.10.0	MIT	http://docs.python- tablib.org/en/latest/
tempus-fugit 1.1	Apache 2.0	http://code.google.com/p/ tempus-fugit/
The Netty Project	Apache 2.0	http://netty.io/
The Netty Project 3.10.5	Apache 2.0	http://netty.io/
valgrind.h from Valgrind	BSD-style 4	http://valgrind.org/
Woodstox 3.2.7	Apache 2.0	http:// woodstox.codehaus.org/
XMLenc Library 0.52	BSD-3	http:// xmlenc.sourceforge.net
XZ for Java 1.0	Public Domain	http://tukaani.org/xz/ java.html
ZooKeeper 3.4.5	Apache 2.0	https:// zookeeper.apache.org/
bgiframe 2.1.1	MIT	https://github.com/ brandonaaron/bgiframe
Bootplus 1.0.3	Apache 2.0	https://github.com/aozora/bootplus
DataTables 1.9.4	BSD	https://www.nuget.org/ packages/jquery.datatables
DataTables ColVis	BSD-3	https://github.com/ DataTables/ColVis

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
DataTables TableTools	BSD-3	https://github.com/ DataTables/TableTools
Interface Elements for jQuery	MIT	http://interface.eyecon.ro/
Javassist 3.18.1-GA	Apache 2.0	https://github.com/jboss- javassist/javassist/tree/ rel_3_18_1_ga
Jetty Utilities 8.1.10.v20130312	Apache 2.0	http://www.eclipse.org/ jetty
jQuery Autocomplete Plugin	MIT	https://github.com/ agarzola/ jQueryAutocompletePlugin
jQuery BBQ 1.2.1	MIT	https://github.com/ cowboy/jquery-bbq/tree/ v1.2.1
jQuery BlockUI Plugin 2.39	MIT	http://malsup.com/jquery/ block/
jQuery Collapse 0.9.1	MIT	http://github.com/ danielstocks/jQuery- Collapse/
jQuery ContextMenu 2.1.0	MIT	http://swisnl.github.io/ jQuery-contextMenu/
jQuery Cookie Plugin	MIT	https://github.com/ carhartl/jquery-cookie
jQuery DataTables 1.8.2	BSD-3	https://datatables.net/
jQuery Form Plugin 2.47	MIT	http://malsup.com/jquery/ form/
jQuery hashchange event 1.2	MIT	https://github.com/ cowboy/jquery-hashchange/ tree/v1.2
jQuery Hotkeys Plugin	MIT	https://github.com/jeresig/ jquery.hotkeys
jQuery jsTree 1.0-rc1	MIT	http://jstree.com/
jQuery throttle / debounce 1.1	MIT	https://github.com/ cowboy/jquery-throttle- debounce
jQuery Timepicker Addon	MIT	https://github.com/ trentrichardson/jQuery- Timepicker-Addon/

Table 3-1 (Cont.) Cloudera CDH 5.11 Third Party Licenses

Project	License	Source
jQuery TotalStorage 1.1.2	MIT	https://github.com/ Upstatement/jquery-total- storage
jQuery UI	MIT	https://github.com/jquery/ jquery-ui
Restlet 2.1.4	Apache 2.0	https://restlet.com/
Select2	Apache 2.0	https://github.com/select2/ select2/
Sizzle	MIT	http://sizzlejs.com
vkBeautify 0.99.00.beta	MIT	http:// www.eslinstructor.net/ vkbeautify/

3.2 Cloudera Manager

The table below lists the third-party software licenses for Cloudera Manager (CM) 5.11.

Table 3-2 Third-Party Licenses for Clouder Manager 5.11

Project	License	Source
GeoIP.c from GeoIP Legacy C API by MaxMind LLC	LGPL v2.1+	https://github.com/ maxmind/geoip-api-c/blob/ master/libGeoIP/GeoIP.c
Certificate Authorities Certificates	MPL v2.0	http://mxr.mozilla.org/ mozilla/source/ security/nss/lib/ckfw/ builtins/certdata.txt?raw=1
Chardet	LGPL v2.1+	https://github.com/ chardet/chardet/
nose 1.1.2	LGPL v2.1+	https://pypi.python.org/ pypi/nose/1.1.2
Google Analytics ga.js	Other	https:// developers.google.com/ analytics/devguides/ collection/gajs/
Distribute 0.6.24	ZPL	https://pypi.python.org/ pypi/distribute/0.6.27
GLYPHICONS PRO	Commercial	http://glyphicons.com/

Table 3-2 (Cont.) Third-Party Licenses for Clouder Manager 5.11

Project	License	Source
Java SE	Oracle BCL	http://www.oracle.com/ technetwork/java/javase/ terms/products/index.html
JSLint	MIT	http://www.JSLint.com/
Medusa	MIT	http:// www.nightmare.com/ medusa/
Meld3 0.6.7	ZPL v2.1	https://pypi.python.org/ pypi/meld3/0.6.7
Python ast module	Python License	https://docs.python.org/2/ library/ast.html
Supervisor 3.0	BSD	https://github.com/ Supervisor/supervisor/ tree/3.0
threadpool 1.2.7	MIT	https://github.com/ SpotlightKid/threadpool
uuid 1.30	Python License	http://zesty.ca/python/ uuid.html
Apache Hadoop	Apache 2.0	http://hadoop.apache.org/
Cloudera Impala	Apache 2.0	https://github.com/ cloudera/Impala/tree/cdh5- trunk/common/thrift
Apache Log4j Properties File	Apache 2.0	https://logging.apache.org/ log4j/1.2/manual.html
libtorrent 1.0.7	BSD-3	https://github.com/arvidn/ libtorrent
mime.types	Public Domain	https://svn.apache.org/ repos/asf/httpd/httpd/ trunk/docs/conf/ mime.types
Ace	BSD-3	https://github.com/ ajaxorg/ace
Apache Avro 1.6.3	Apache 2.0	http://avro.apache.org
Apache Flume	Apache 2.0	https://flume.apache.org/
Apache HTTP Server	Apache 2.0	https://github.com/apache/ httpd

Table 3-2 (Cont.) Third-Party Licenses for Clouder Manager 5.11

Project	License	Source
Apache Spark	Apache 2.0	https://github.com/apache/ spark/
Apache Thrift	Apache 2.0	https://thrift.apache.org/
Apache Thrift 0.7.0	Apache 2.0	http://thrift.apache.org
Apache Whirr	Apache 2.0	https://github.com/apache/ whirr
argparse 1.1	Apache 2.0	https://pypi.python.org/ pypi/argparse/1.1
basic.py - basic benchmarks adapted from Genshi	BSD-3	https://github.com/ edgewall/genshi
Beaker 1.5.4	BSD-3	http://beaker.groovie.org
Bootstrap	Apache 2.0	https://github.com/twbs/bootstrap/tree/v2.3.2
Bootstrap Multiselect 0.9.8	BSD-3	https://github.com/ davidstutz/bootstrap- multiselect
Bouncy Castle Crypto	MIT	http:// www.bouncycastle.org/
c3 0.4.10	MIT	https://github.com/c3js/c3/tree/0.4.10
CherryPy 3.2.2	BSD-3	https://github.com/ cherrypy/cherrypy/tree/ cherrypy-3.2.2
Cloudera HBase	Apache 2.0	https://github.com/ cloudera/hbase https:// www.cloudera.com/ products/apache-hadoop/ apache-hbase.html
Cloudera Manager Extensions	Apache 2.0	https://github.com/ cloudera/cm_ext
Cloudera Manager RESTful API Clients	Apache 2.0	https://github.com/ cloudera/cm_api
Cloudera RecordService	Apache 2.0	https://github.com/ cloudera/ RecordServiceClient/

Table 3-2 (Cont.) Third-Party Licenses for Clouder Manager 5.11

Project	License	Source
Cloudera Search	Apache 2.0	https://github.com/ cloudera/search
Code Adapted from classList.js	Unlicense	https://github.com/eligrey/ classList.js/blob/master/ classList.js
Code Adapted from PTClass	MIT	https://github.com/Jakobo/ PTClass/blob/master/ class.js
init-functions by Chris Lawrence	BSD-3	http://cosmolinux.no- ip.org/dsl/init-functions
"Deep Equality of Python Structures" By Samuel Sutch	MIT	https:// web.archive.org/web/ 20130328101147/http:// ssutch.org/deep-equality-of- python-structures
"Lucene in Action, Second Edition"	Apache 2.0	https://www.manning.com/books/lucene-in-action-second-edition
Codemirror Python mode	MIT	http://codemirror.net/ mode/python/
D3.js 3.5.9	BSD-3	https://github.com/d3/d3/ tree/v3.5.9
daemonize 2.4.2	MIT	https://github.com/ thesharp/daemonize
Date Range Picker for Bootstrap	MIT	https://github.com/ dangrossman/bootstrap- daterangepicker
elementtree 1.2.7	MIT Style	http://effbot.org/zone/ element-index.htm
Google-code-prettify	Apache 2.0	https://www.nuget.org/ packages/Prettify
Gridster.js 0.5.2	MIT	https://github.com/ ducksboard/gridster.js
Guppy 0.1.10	MIT	https://pypi.python.org/ pypi/guppy/
ipython 0.12.1	BSD-3	https://pypi.python.org/ pypi/ipython/0.12.1

Table 3-2 (Cont.) Third-Party Licenses for Clouder Manager 5.11

Project	License	Source
Jasmine 1.3.1	MIT	https://github.com/ jasmine/jasmine
Jasmine-Ajax	MIT	http://github.com/pivotal/ jasmine-ajax
jQuery	MIT	http://jquery.com/
jQuery Migrate 1.2.1	MIT	https://github.com/jquery/ jquery-migrate/tree/1.2.1
jQuery Mouse Wheel Extension 3.0.4	MIT	https://github.com/jquery/ jquery-mousewheel
kerberos 1.1.1	Apache 2.0	https://pypi.python.org/ pypi/kerberos
M2Crypto 0.21.1	MIT	https://pypi.python.org/ pypi/M2Crypto/0.21.1
Mako 0.3.4	MIT	https://pypi.python.org/ pypi/Mako/0.3.4
Markdown parser	MIT	https://github.com/ evilstreak/markdown-js
MarkupSafe 0.11	BSD-3	https://pypi.python.org/ pypi/MarkupSafe
Mock 0.8.0	BSD-2	http:// www.voidspace.org.uk/ python/mock/
Modernizr 2.6.2	MIT	https://modernizr.com/
Moment.js	MIT	https://github.com/ moment/moment
Multiprocessing 2.6.2.1	BSD-3	https://pypi.python.org/ pypi/multiprocessing/
netifaces 0.8	MIT	http://alastairs-place.net/ projects/netifaces/
Plugins for RequireJS 0.4.0	MIT	https://github.com/ millermedeiros/requirejs- plugins
PrettyTable	BSD-3	https://pypi.python.org/ pypi/PrettyTable
psutil 2.1.3	BSD-3	https://github.com/ giampaolo/psutil

Table 3-2 (Cont.) Third-Party Licenses for Clouder Manager 5.11

Project	License	Source
Pyinotify 0.9.3	MIT	https://github.com/seb-m/ pyinotify
python-patch	MIT	https://code.google.com/ archive/p/python-patch/
Requests	Apache 2.0	https://github.com/ kennethreitz/requests/
RequireJS	MIT	https://github.com/ requirejs/requirejs
Rickshaw 1.4.6	MIT	https://github.com/ shutterstock/rickshaw
Simplejson 2.1.2	MIT	https://github.com/ jasondavies/science.js/
Science.js 1.7.0	BSD-3	https://pypi.python.org/ pypi/simplejson/2.1.2
Sizzle	MIT	http://sizzlejs.com
Text 2.0.12	MIT	https://github.com/ requirejs/text/tree/2.0.12
toposort 1.1	Apache 2.0	https://pypi.python.org/ pypi/toposort
Underscore.js	MIT	https://github.com/ jashkenas/underscore
urllib2_kerberos 0.1.6	Apache 2.0	http:// web.archive.org/web/ 20090316061906/http:// limedav.com/hg/ urllib2_kerberos/
Interface Elements for jQuery	MIT	http://interface.eyecon.ro/
jQuery DataTables 1.8.2	BSD-3	https://datatables.net/
jQuery Layout 1.4.3	MIT	http://layout.jquery-dev.com/
jQuery Timepicker Addon	MIT	https://github.com/ trentrichardson/jQuery- Timepicker-Addon/
jQuery Tokeninput	MIT	http://loopj.com/jquery-tokeninput/

Table 3-2 (Cont.) Third-Party Licenses for Clouder Manager 5.11

Drainat	Lineman	Course
Project	License	Source
jQuery treeTable 2.3.0	MIT	https://github.com/ludo/ jquery-treetable/tree/2.3.0
jQuery UI	MIT	https://github.com/jquery/ jquery-ui
jQuery UI Bootstrap	MIT	https://github.com/jquery- ui-bootstrap/jquery-ui- bootstrap
jQuery UI Date Range Picker	MIT	https://github.com/ filamentgroup/jQuery-UI- Date-Range-Picker
jQuery UI Slider Access 0.3	MIT	http://trentrichardson.com/ examples/jQuery- SliderAccess/
jQuery Validation Plugin 1.8.1	MIT	https://github.com/ jzaefferer/jquery-validation/ tree/1.8.1
Markdown 1.5a	BSD	https://pypi.python.org/ pypi/Markdown
QUnit	MIT	https://github.com/jquery/ qunit
Select2	Apache 2.0	https://github.com/select2/ select2/
Sizzle	MIT	http://sizzlejs.com

3.3 Cloudera Key Trustee

The following are third-party software projects used with the Cloudera Key Trustee 5.11 and its subcomponents. Not all of these projects are distributed with the software.

Table 3-3 Third-Party Projects for Cloudera Key Trustee 5.11

Project	License	Source
AOP Alliance 1.0	Public Domain	http://aopalliance.sourceforge.net/
Apache bzip2 [bundled with Bouncy Castle Crypto 1.47]	Apache 2.0	http:// commons.apache.org/ proper/commons-compress/
Apache Commons Codec 1.4	Apache 2.0	http:// commons.apache.org/ proper/commons-digester/

Table 3-3 (Cont.) Third-Party Projects for Cloudera Key Trustee 5.11

Project	License	Source
Apache Commons IO 2.4	Apache 2.0	http:// commons.apache.org/ proper/commons-io/
Apache Commons Lang 2.6	Apache 2.0	http:// commons.apache.org/ proper/commons-lang/
Apache Commons Lang 3.1	Apache 2.0	http:// commons.apache.org/ proper/commons-lang/
Apache Commons Logging 1.1.1	Apache 2.0	http:// commons.apache.org/ proper/commons-logging/
Apache Commons Pool 2.2	Apache 2.0	https:// commons.apache.org/ proper/commons-pool/
Apache Tomcat 7.0.54	Apache 2.0	http://tomcat.apache.org/
Autoconf Macro Archive	GPL v2.0+ with Autoconf Exception	http://ac- archive.sourceforge.net/
Bean Validation API 1.1.0.Final	Apache 2.0	http://beanvalidation.org/
Bison Parser 2.5 [bundled with Postgres]	GPL v3.0+ with Special Exception	https://www.gnu.org/ software/bison/
Bouncy Castle Crypto 1.46	Legion of the Bouncy Castle License	http:// www.bouncycastle.org/
Bouncy Castle Crypto 1.47	Legion of the Bouncy Castle License	http:// www.bouncycastle.org/
c99-backport.m4 from memcached	BSD-3	https://github.com/egh/ memcached
Chardet [bundled with Python Package - Requests 2.7.0]	LGPL v2.1+	https://github.com/ chardet/chardet
cJSON	MIT	https://github.com/ DaveGamble/cJSON
ClassMate 1.0.0	Apache 2.0	http://github.com/ cowtowncoder/java- classmate
Cloudera - KeyTrustee Java Client 5.9.0	Possibly Apache 2.0, See notes	www.cloudera.com/
Cloudera - KeyTrustee KeyProvider 5.9.0	Likely Apache 2.0	https://www.cloudera.com/

Table 3-3 (Cont.) Third-Party Projects for Cloudera Key Trustee 5.11

Table 3-3 (Cont.) Third-Pai	rty Projects for Cloude	era Key Trustee 5.11
Project	License	Source
Cloudera - Navencrypt Apparmor Script	GPL v2.0	www.cloudera.com/
Cloudera - Navencrypt Backup Script	GPL v2.0+	www.cloudera.com/
Cloudera - Navencrypt Collect Script	GPL v2.0+	www.cloudera.com/
Cloudera - Navencrypt Configure Script	GPL v2.0+	www.cloudera.com/
Cloudera - Navencrypt Function Script	GPL v2.0+	http://www.cloudera.com
Cloudera - Navencrypt Move Script	GPL v2.0+	www.cloudera.com/
Cloudera - Navencryptfs Kernel Module	GPL v2.0	http://www.cloudera.com/ content/cloudera/en/ solutions/enterprise- solutions/security-for- hadoop.html
Cloudera - Postinst Package Debian Script	GPL v2.0+	http://www.cloudera.com/
Cloudera - Prerm Package Debian Script	GPL v2.0+	http://www.cloudera.com/
Cloudera - Source Code from Navencrypt Deployment	Apache 2.0	https://github.com/ clouderasecurity/ navencrypt-deployment
Cloudera - ztrustee Debianized Package	GPL v3.0	http://launchpad.net/ ztrustee
CMake FindGMock	MIT	https://github.com/triglav/cmake-findgmock
Code based on Apache Hadoop	Apache 2.0	http://hadoop.apache.org/
Code based on Article, "No Nonsense Logging in C (and C++)"	Unknown	http://kev009.com/wp/2010/12/no-nonsense-logging-in-c-and-cpp/
Code Copied from Linux Kernel 3.7.2	GPL v2.0	https://www.kernel.org/
Code from File gistfile1.py from Github Gist	Unknown	https://gist.github.com/ edufelipe/1027906
Code from Stackoverflow Article, "Getting the source directory of a Bash script from within"	CC BY-SA 3.0	http://stackoverflow.com/ questions/59895/getting-the- source-directory-of-a-bash- script-from-within

Table 3-3 (Cont.) Third-Party Projects for Cloudera Key Trustee 5.11

Project	License	Source
Code from Stackoverflow Article, "How do you match only valid roman numerals with a regular expression?" [bundled with Python Package - Pyparsing]	CC BY-SA 3.0	http://stackoverflow.com/ questions/267399/how-do- you-match-only-valid- roman-numerals-with-a- regular-expression
Code from Stackoverflow Article, "How do you remove duplicates from a list in whilst preserving order?"	CC BY-SA 3.0	http://stackoverflow.com/ questions/480214/how-do- you-remove-duplicates-from- a-list-in-whilst-preserving- order
Code from Stackoverflow Article, "Print in terminal with colors using Python?"	CC BY-SA 3.0	http://stackoverflow.com/ questions/287871/print-in- terminal-with-colors-using- python
Code Taken from Article, "URL Encoding/Decoding in C"	Likely Creative Commons Public Domain	http:// www.geekhideout.com/ urlcode.shtml
Code Taken from getinmemory.html from Curl	MIT with Advertising Clause	https://curl.haxx.se/ libcurl/c/getinmemory.html
Crypt Blowfish 1.2 [bundled with Python Package - Bcrypt 1.0.2]	Public Domain	http://www.openwall.com/ crypt/
Dependency on Apache log4j 1.2.17	Apache 2.0	https://logging.apache.org/log4j/1.2/
Dependency on Apache Maven	Apache 2.0	http://maven.apache.org/
Dependency on Mod_wsgi	Apache 2.0	https://code.google.com/ archive/p/modwsgi/
distlib [bundled with Python Package - Pip 1.4.1]	PSF License, See notes about subcomponent	https://pypi.python.org/ pypi/distlib
FAMFAMFAM Silk Icons	CC Attribution 2.5 or CC Attribution 3.0, See License	http:// www.famfamfam.com/lab/ icons/silk/
File activate_this.py from virtualenv	MIT	https://github.com/pypa/ virtualenv/blob/master/ virtualenv_embedded/ activate_this.py
Files containing Apache Hadoop [bundled with Cloudera KeyTrustee KeyProvider]	Apache 2.0	http://hadoop.apache.org/

Table 3-3 (Cont.) Third-Party Projects for Cloudera Key Trustee 5.11

Table 3-3 (Cont.) Third-Fai	ty Frojects for Cloudera Re	y Trustee 5.11
Project	License	Source
Files from Python Package - itsdangerous	BSD-3	https://github.com/pallets/ itsdangerous
Files Generated by GNU Autoconf 2.68	Permissive	https://www.gnu.org/ software/autoconf/ autoconf.html
Files Generated by GNU Automake 1.11.3 [Bundled with gmock and gtest]	Permissive	https://www.gnu.org/ software/automake/
Files originating from Python	PSF License	https://www.python.org/
Google Mock 1.7.0	BSD-3	https://github.com/google/ googlemock
Google Test 1.7.0	BSD-3	https://github.com/google/ googletest
Guava Libraries 11.0.2	Apache 2.0	https://github.com/google/ guava
Hibernate Validator 5.0.3	Apache 2.0	http://www.hibernate.org/ subprojects/validator.html
html5lib-python [bundled with Python Package - Pip 1.4.1]	MIT	https://github.com/ html5lib/html5lib-python
ipaddress	PSF License	https://github.com/ HaDiNet/python-ipaddress
Jackson Annotations 2.3.0	Apache 2.0	https://github.com/ FasterXML/jackson- annotations
Jackson Core 2.3.3	Apache 2.0	https://github.com/ FasterXML/jackson-core
Jackson Databind 2.3.3	Apache 2.0	https://github.com/ FasterXML/jackson-databind
Java Concurrency in Practice [bundled with JSR305 Implementation in FindBugs]	CC BY 2.5	http://jcip.net/
Java Cryptography Extension 1.2.2	Oracle Binary Code License	http://www.oracle.com/ technetwork/java/ jce-140292.html
JBoss Logging 3 3.1.1.GA	LGPL v2.1	http://www.jboss.org
JCL over SLF4J Bridging legacy APIs 1.7.7	Apache 2.0	http://www.slf4j.org/ legacy.html
jQuery	GPL v2.0 or MIT	http://jquery.com/

Table 3-3 (Cont.) Third-Party Projects for Cloudera Key Trustee 5.11

Project	License	Source
jQuery Metadata	GPL or MIT	https://github.com/jquery- archive/jquery-metadata
JSON	Good, not Evil	http://www.json.org/java/index.html
JSR305 Implementation in FindBugs	BSD-3	http:// findbugs.sourceforge.net/
JUL over SLF4J Bridging legacy APIs 1.7.7	MIT	http://www.slf4j.org/ legacy.html
Log4j over SLF4J Bridging legacy APIs 1.7.7	Apache 2.0	http://www.slf4j.org/ legacy.html
Logback 1.1.2	LGPL v2.1 or EPL v1.0	http://logback.qos.ch/
Module doctest [Bundled with python package nose and paste]	Public Domain	http://wiki.c2.com/? TimPeters
PLY [Bundled with Python Package - Pycparser 2.10]	BSD-3	http:// www.dabeaz.com/ply/
Postgres 9.3	PostgresQL License, See notes about subcomponents	https://github.com/ postgres/postgres/tree/ REL9_3_0
Python DB API Driver 2.0 [Bundled with Python Package - Psycopg 2.5.4]	Public Domain	https://launchpad.net/ dbapi-compliance
Python Package - Argparse 1.4.0	PSF License	https://github.com/ ThomasWaldmann/ argparse/tree/r140
Python Package - Autopep8 1.0.3	MIT	https://github.com/hhatto/ autopep8/tree/ver1.0.3
Python Package - Bcrypt 1.0.2	Apache 2.0	https://github.com/dstufft/ bcrypt
Python Package - CFFI 1.7.0	MIT	http:// cffi.readthedocs.io/en/ latest/
Python Package - CherryPY 3.2.3	BSD-3	http://cherrypy.org/
Python Package - Cryptography 1.5	BSD-3 or Apache 2.0	https://github.com/pyca/ cryptography/tree/1.5
Python Package - ECDSA 0.11	MIT	https://github.com/warner/ python-ecdsa/tree/python- ecdsa-0.11

Table 3-3 (Cont.) Third-Party Projects for Cloudera Key Trustee 5.11

Table 3-3 (Cont.) Third-Fai	ty Projects for Cloudera Res	Trustee 5.11
Project	License	Source
Python Package - enum34 1.1.6	BSD-3	https://pypi.python.org/ pypi/enum34
Python Package - Flake8 2.2.2	MIT	https://bitbucket.org/tarek/flake8/wiki/Home
Python Package - Flask 0.10.1	BSD-3	https://github.com/pallets/flask
Python Package - IDNA 2.1	BSD-like	https://github.com/kjd/idna/tree/v2.1
Python Package - ipaddress 1.0.16	PSF License	https://github.com/phihag/ipaddress
Python Package - itsdangerous 0.24	BSD-3	https://github.com/pallets/ itsdangerous/tree/0.24
Python Package - jinja2 2.7.3	BSD-3	https://github.com/pallets/ jinja
Python Package - Linecache2 1.0.0	PSF License	https://github.com/testing-cabal/linecache2/tree/1.0.0
Python Package - MarkupSafe 0.23	BSD-3	https://github.com/pallets/ markupsafe
Python Package - McCabe 0.2.1	MIT	https://github.com/ PyCQA/mccabe/tree/0.2.1
Python Package - Nose 1.3.6	LGPL v2.1	https:// nose.readthedocs.io/en/ latest/
Python Package - ordereddict 1.1	MIT	https://pypi.python.org/ pypi/ordereddict
Python Package - Packaging 16.7	BSD-2 or Apache 2.0	https://github.com/pypa/ packaging
Python Package - Paramiko 1.14.0	LGPL v2.1+	https://github.com/ paramiko/paramiko/tree/ v1.14.0
Python Package - Paste 1.7.5.1	MIT	http://pythonpaste.org
Python Package - pep8 1.5.7	MIT	https://pypi.python.org/ pypi/pep8
Python Package - Pip 1.4.1	MIT	http://www.pip-installer.org
Python Package - Psutil 2.1.1	BSD-3	https://code.google.com/ archive/p/psutil/
Python Package - Psycopg 2.5.4	LGPL v3.0+ with OpenSSL Exception or ZPL, See Notes	http://initd.org/psycopg/

Table 3-3 (Cont.) Third-Party Projects for Cloudera Key Trustee 5.11

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Project	License	Source
Python Package - Pyasn1 0.1.9	BSD-2	https://sourceforge.net/ projects/pyasn1/
Python Package - Pycparser 2.10	BSD-3	https://github.com/eliben/ pycparser
Python Package - Pycrypto 2.6.1	Public Domain	https://github.com/dlitz/ pycrypto
Python Package - Pycurl	LGPL v2.1 or MIT	https://github.com/pycurl/ pycurl
Python Package - Pyflakes 0.8.1	MIT	https://launchpad.net/ pyflakes
Python Package - PyOpenSSL	Apache 2.0	https://github.com/pyca/ pyopenssl
Python Package - Pyparsing	MIT	https://pypi.python.org/ pypi/pyparsing/1.5.7
Python Package - Pytz 2014.4	ZPL v2.1 or MIT	http://pythonhosted.org/ pytz/
Python Package - Requests 2.7.0	Apache 2.0	https://github.com/ kennethreitz/requests
Python Package - Setuptools 26.0.0	MIT	https://github.com/pypa/setuptools/tree/v26.0.0
Python Package - Six	MIT	https://pypi.python.org/ pypi/six
Python Package - SQLAlchemy 0.9.7	MIT	http:// www.sqlalchemy.org/
Python Package - Traceback2 1.4.0	PSF License	https://github.com/testing-cabal/traceback2
Python Package - Unittest2 1.0.1	BSD-3	https://pypi.python.org/ pypi/unittest2/1.0.1
Python Package - urlib3 1.10.4	MIT	https://github.com/ shazow/urllib3
Python Package - Werkzeug 0.9.6	BSD-3	http://werkzeug.pocoo.org/
PyUnit [Bundled with Python Package - Unittest2 1.0.1]	PSF License	http:// pyunit.sourceforge.net/
Reference to Various Stackoverflow Articles	CC BY-SA 3.0	http://stackoverflow.com/

Table 3-3 (Cont.) Third-Party Projects for Cloudera Key Trustee 5.11

Project	License	Source
Serpent S Boxes [bundled with Bouncy Castle Crypto 1.46]	Serpent S Boxes License	http:// web.archive.org/web/ 20080415214327/http:// fp.gladman.plus.com/ cryptography_technology/ aesr1/f_box.h
Serpent S Boxes [bundled with Bouncy Castle Crypto 1.47]	Serpent S Boxes License	http:// web.archive.org/web/ 20080415214327/http:// fp.gladman.plus.com/ cryptography_technology/ aesr1/f_box.h
Six [Bundled with Varius Python Packages]	MIT	https://pypi.python.org/ pypi/six
Sizzle [Bundled with jQuery]	GPL v2.0 or BSD-3 or MIT	http://sizzlejs.com
SLF4J 1.7.5	MIT	http://www.slf4j.org/
SnakeYAML 1.13	Apache 2.0	http://www.snakeyaml.org
Spring Framework - Boot 1.1.5	Apache 2.0	http://projects.spring.io/ spring-boot/
Spring Framework 4.0.0	Apache 2.0	https://projects.spring.io/ spring-framework/
Sun XML Parser	Commercial, See license, See notes	http://www.oracle.com/ technetwork/java/ index.html
Tablesorter 2.0.5b	GPL or MIT	http://tablesorter.com/docs/
The Cryptix Project	BSD-2	http://www.cryptix.org/
Ubuntu Font [Bundled with Python Package - werkzeug 0.9.6]	Ubuntu Font License	http://font.ubuntu.com/
uthash	BSD style	http:// troydhanson.github.io/ uthash/

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