

Oracle Utilities Generation Asset Manager Cloud Service

Overview Guide

Release 22B

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Oracle Utilities Generation Asset Manager Cloud Service Release 22B Overview Guide

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Contents

Chapter 1

Generation Asset Manager Cloud Service Overview Guide	1-1
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Chapter 2

Generation Asset Manager Cloud Service Overview	2-1
Welcome to Oracle Utilities Generation Asset Manager Cloud Service	2-2
Oracle Utilities Generation Asset Manager Cloud Service Applications	2-3
Oracle Utilities Generation Asset Manager Cloud Service Documentation	2-4
Supported Client Platforms and Browsers	2-5
High-Level Roles and Responsibilities	2-6
Hardware, Storage, Technology, and Application Software	2-6
Security	2-6
Database	2-6
Implementation, Configuration, and Extensions	2-7
Patching and Upgrading	2-7
Batch Processing	2-7
Support	2-8
Integration	2-8

Chapter 3

Oracle Utilities Cloud Services

Third Party Software and Licenses	3-1
Third Party Software Notices	3-2
Third Party Software Licenses	3-7
Notice Concerning Use of Software Covered Under the Apache 2.0 License	3-7
Notice Concerning Use of Software Covered Under the BSD 2-clause or 3-clause License	3-12
Notice Concerning Use of Google Software	3-12
Notice Concerning Use of Software Covered Under the MIT License	3-13
Notice Concerning Use of DOM4J	3-14
Notice Concerning Use of JSON	3-14
Notice Concerning Use of OCI SDK for JAVA	3-15
Notice Concerning Use of Python	3-15
Notice Concerning Usage of Software Covered Under the GNU General Public License	3-30
Notice Concerning Usage of ICU and ICU4J	3-35
Notice Concerning Use of Simple Logging Facade for Java (SLF4J)	3-42
Notice Concerning Use of Velocity Engine	3-44

Chapter 1

Generation Asset Manager Cloud Service Overview Guide

Welcome to the Oracle Utilities Generation Asset Manager Cloud Service Overview Guide. This document provides an overview of the Oracle Utilities Generation Asset Manager Cloud Service, including:

- [Generation Asset Manager Cloud Service Overview](#)
- [Oracle Utilities Cloud Services Third Party Software and Licenses](#)

Chapter 2

Generation Asset Manager Cloud Service Overview

This chapter provides an overview of the Oracle Utilities Generation Asset Manager Cloud Service, including:

- [Welcome to Oracle Utilities Generation Asset Manager Cloud Service](#)
- [Oracle Utilities Generation Asset Manager Cloud Service Applications](#)
- [Oracle Utilities Generation Asset Manager Cloud Service Documentation](#)
- [Supported Client Platforms and Browsers](#)
- [High-Level Roles and Responsibilities](#)

Welcome to Oracle Utilities Generation Asset Manager Cloud Service

Oracle Utilities Generation Asset Manager Cloud Service is a scalable operational awareness tool that can organize and visualize real-time and historical data from operational technology systems. It is tightly integrated with Oracle Utilities Live Energy Connect. Generation Asset Manager Cloud Service allows users to view, track, and understand real-time and historical performance of their assets.

Generation Asset Manager Cloud Service comprises two basic components: the Live Energy Connect Portal, a web-based application, and the Historian, a cloud-based time series database.

You can use the Live Energy Connect Portal to:

- View unit statuses
- Receive real-time notifications and alerts about each unit
- Select which metrics display in graph view for a unit
- Browse historical data for each unit
- View market positions

Oracle Utilities Generation Asset Manager Cloud Service Applications

Oracle Utilities Generation Asset Manager Cloud Service includes the following applications:

- Oracle Utilities Generation Asset Manager
- Oracle Utilities Cloud Service Foundation
- Oracle Utilities Analytics Visualization
- Oracle Analytics Publisher

Oracle Utilities Generation Asset Manager Cloud Service Documentation

Configuration and use of Oracle Utilities Generation Asset Manager Cloud Service is described in the following documentation:

- Oracle Utilities Generation Asset Manager Cloud Service User Guides, comprising:
 - Oracle Utilities Generation Asset Manager Cloud Service 22B Business User's Guide
 - Oracle Utilities Generation Asset Manager Cloud Service 22B Administrative User's Guide
- Oracle Utilities Cloud Services 22B documentation, including:
 - Oracle Utilities Cloud Service Foundation Administrative User Guide
 - Oracle Utilities Cloud Services Administration Guide
 - Oracle Utilities Cloud Services Database Changes Guide
 - Oracle Utilities Cloud Services Frequently Asked Questions Guide
 - Oracle Utilities Cloud Services Implementation Guide
 - Oracle Utilities Cloud Services Live Operations Guide
 - Oracle Utilities Cloud Services Security Guide
 - Oracle Utilities Cloud Services Update Policy Guide
- Oracle Utilities Cloud Services Cloud Operations Guide
- Oracle Utilities Analytics Visualization User Guide

Supported Client Platforms and Browsers

Users access Oracle Utilities Generation Asset Manager Cloud Service via a supported web browser.

Oracle Utilities Generation Asset Manager Cloud Service supports the following operating system & web browser combinations:

Operating System	Web Browser
Windows 10	Firefox ESR 91+ Google Chrome for Enterprise 98+ Microsoft Edge (Chromium-based) 98+ (see the Microsoft Edge Release Schedule for more information)

The recommended monitor resolution is 1920 X 1080 or higher with the browser zoom level set at 100%. The application can be used with lower resolution monitors and/or at a greater than 100% browser zoom level, but users may need to use horizontal scrolling on some pages.

High-Level Roles and Responsibilities

This section outlines high-level roles and responsibilities involved in the deployment, configuration, and maintenance of Oracle Utilities cloud services, and the party responsible for each. The **Owner** column in the tables below indicates the party responsible for each role and responsibility.

Hardware, Storage, Technology, and Application Software

Role and Responsibility	Owner
Provide, deploy and monitor hardware and storage	Oracle
Provide, deploy, run and monitor all required technology (e.g containers, operating systems, databases, clustering, monitoring, tracing)	Oracle
Provide, deploy, run and monitor all Oracle Utilities base application software	Oracle

Security

Role and Responsibility	Owner
Monitor cloud service infrastructure security	Oracle
Administer Oracle network security	Oracle
Administer customer network security, including integrating with the Oracle networks	Customer
Configure & maintain cloud service users and access	Customer
Integrate with Oracle networks	Customer

Database

Role and Responsibility	Owner
Database administration services (monitoring, administration, etc)	Oracle
Backup and Restore	Oracle
Backup retention	Oracle
Data replication for Disaster Recovery (where applicable)	Oracle
Disaster Recovery database fail-over	Oracle
Refresh of TEST DB from PROD (upon request and within prescribed limits)	Oracle

Role and Responsibility	Owner
Information Lifecycle Management	Customer

Implementation, Configuration, and Extensions

Role and Responsibility	Owner
Plan and execute implementation project	Customer
Perform configuration of enterprise software features and functions	Customer
Execute functional, system, load and performance testing of configuration and extensions	Customer
Ensure operational readiness	Customer
Schedule all gate review services	Customer

Patching and Upgrading

Role and Responsibility	Owner
Patch and upgrade underlying infrastructure software	Oracle
Patch and upgrade Oracle Utilities base application software	Oracle
Decide the cloud service upgrade schedule (within prescribed limits)	Customer
Trigger environment upgrades (Development, Test and Production)	Customer
Perform regression testing of configuration and extensions after patching / upgrades	Customer

Batch Processing

Role and Responsibility	Owner
Monitor underlying batch infrastructure	Oracle
Provide infrastructure logs for batch incidents	Oracle
Resolve infrastructure batch issues	Oracle
Determine batch schedule	Customer
Monitor batch stream/job completion	Customer
Perform first level investigation of batch issues	Customer
Provide customer logs of batch incidents	Customer

Role and Responsibility	Owner
Resolve functional batch issues and stream/job restart	Customer
Resolve data issues	Customer

Support

Role and Responsibility	Owner
Triage, analyze, and resolve issues with the cloud service	Oracle
Triage, analyze, and resolve issues with configuration and extensions	Customer
Raise Service Requests via My Oracle Support and provide all requested information	Customer

Integration

Role and Responsibility	Owner
Provide productized integrations (where explicitly agreed)	Oracle
Integrate Oracle Utilities cloud services with all other services or applications	Customer

Chapter 3

Oracle Utilities Cloud Services Third Party Software and Licenses

This chapter information regarding third-party software used in Oracle Utilities cloud services, including:

- [Third Party Software Notices](#)
- [Third Party Software Licenses](#)

Refer to the *Oracle Utilities Meter Data Management v2.5.0.0 Licensing Information User Manual* for additional third-party licensing information.

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Apache	Commons Codec	1.11	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Apache	Commons FileUpload	1.4-ce5ce15	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Apache	Commons HttpClient	4.1.2	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Apache	commons-cli	1.3.1	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Apache	HttpCore	4.4.13	Copyright 2005-2019 The Apache Software Foundation
Apache	httpd	2.4.39	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Apache	Kafka	2.1.0 2.3.0	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Apache	Log4J	2.8.2 2.10.0	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Apache	lz4-java	1.4	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Apache	org.yaml/snakeyaml	1.19	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Apache	Tomcat Embed	9.0.12	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Apache	ZooKeeper	3.4.14 3.5.4	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
The Apache Software Foundation	Ant	1.10.11	Copyright 1999-2021 The Apache Software Foundation
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The Apache Software Foundation	Commons IO	2.7	Copyright 2002-2019 The Apache Software Foundation.
The Apache Software Foundation	Commons Text	1.9	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
The Apache Software Foundation	Curator-Framework	5.2.0	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
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The Apache Software Foundation	XMLSchema Core	2.2.5	Copyright 2004-2015 The Apache Software Foundation Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Aslak Helleøy	Gherkin	6.0.14	Copyright (c) Cucumber Ltd, Gaspar Nagy, Björn Rasmusson, Peter Sergeant
cliftonlabs	json-simple	3.0.2	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Codehaus	animal-sniffer-annotation	1.14	Released under the MIT license
Connect2id Ltd	Nimbus JOSE+JWT	6.7	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Elasticsearch	Curator	5.5.0	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
Elasticsearch	Logstash (without x-pack)	6.2.3	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
FasterXML, LLC	jackson-annotations	2.12.2	Copyright (c) 2020 Tatu Saloranta

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Marijn Haverbeke	CodeMirror	5.62	Released under the MIT license Copyright (C) 2017 by Marijn Haverbeke <marijnh@gmail.com> and others
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neezegee / Pedro Gomes	Apache Exporter for Prometheus	0.4.0	Copyright (c) 2015 neezegee Released under the MIT license
Opentracing.io	OpenTracing API for Java	0.31.0	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/

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The Netty Project	netty-codec	4.1.52.Final	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
The Netty Project	netty-codec-dns	4.1.52.Final	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
The Netty Project	netty-codec-http	4.1.52.Final	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
The Netty Project	netty-codec-http2	4.1.52.Final	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/
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Unknown	docker-java	3.0.14	Apache License, Version 2.0, January 2004 http://www.apache.org/licenses/

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- Curator-Framework 5.2.0
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- grpc-java 1.16.1
- Guava 26.0
- HttpComponents HttpClient 4.5.13
- HttpCore 4.4.13
- httpd 2.4.39
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- Jaeger-Thrift 1.8.0
- jackson-annotations-2.12.2
- jackson-core-2.12.6
- jackson-databind-2.12.6.1
- jboss-logging 3.4.3
- json-simple 3.0.2
- Kafka 2.1.0, 2.3.0
- Log4J 2.8.2, 2.10.0
- Logstash (without x-pack) 6.2.3
- lz4-java 1.4
- Membrane SOA Model 1.6.0-088c7a9
- netty-buffer 4.1.52.Final
- netty-codec 4.1.52.Final
- netty-codec-dns 4.1.52.Final
- netty-codec-http 4.1.52.Final
- netty-codec-http2 4.1.52.Final
- netty-codec-socks 4.1.52.Final
- netty-common 4.1.52.Final
- netty-handler 4.1.52.Final
- netty-handler-proxy 4.1.52.Final
- netty-resolver 4.1.52.Final
- netty-resolver-dns 4.1.52.Final
- netty-transport 4.1.52.Final
- Nimbus JOSE+JWT 6.7
- oci-java-sdk 1.2.41
- org.yaml/snakeyaml 1.19
- OpenNLP-tools 1.9.1
- OpenTracing API for Java 0.31.0

- Prometheus 2.2.0
- Prometheus AlertManager 0.14.0
- Prometheus JVM Client 0.2.0
- Selenium Server 3.14.0
- SnakeYAML 1.21
- SnakeYAML 1.24
- snappy-java 1.1.7.1
- Tomcat Embed 9.0.12
- Velocity Engine 2.3
- XMLBeans 4.0.0
- XMLSchema Core 2.2.5
- ZooKeeper 3.4.14, 3.5.4

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Mersenne Twister

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A C-program for MT19937, with initialization improved 2002/1/26.

Coded by Takuji Nishimura and Makoto Matsumoto.

Before using, initialize the state by using `init_genrand(seed)` or `init_by_array(init_key, key_length)`.

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Modified by Jack Jansen, CWI, July 1995:

- Use binascii module to do the actual line-by-line conversion between ascii and binary. This results in a 1000-fold speedup. The C version is still 5 times faster, though.
- Arguments more compliant with Python standard

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Original location:

<https://github.com/majek/siphash/>

Solution inspired by code from:

Samuel Neves (supercop/crypto_auth/siphash24/little)

djb (supercop/crypto_auth/siphash24/little2)

Jean-Philippe Aumasson (<https://131002.net/siphash/siphash24.c>)

strtod and dtoa

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jloup@gzip.org madler@alumni.caltech.edu

cfuhash

The implementation of the hash table used by the `tracemalloc` is based on the cfuhash project:

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Modules:

slf4j-api
 slf4j-simple
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 slf4j-ext
 jcl-over-slf4j
 log4j-over-slf4j
 jul-to-slf4j
 osgi-over-slf4j
 integration
 slf4j-site
 slf4j-migrator

4P Dependencies:

ch.qos.cal10n call0n-api 0.8.1

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The files

- velocity-engine-scripting/src/main/java/org/apache/velocity/script/VelocityScriptEngine.java

- velocity-engine-scripting/src/main/java/org/apache/velocity/script/VelocityScriptEngineFactory.java

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