# Oracle Utilities Analytics Quick Installation Guide

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# **Preface**

This guide describes how to install and configure Oracle Utilities Analytics v2.5.2.0.1, including:

- Audience
- Prerequisite Knowledge
- Related Documents
- Conventions
- Acronyms

#### **Audience**

This guide is intended for anyone interested in the process of installing, upgrading or configuring Oracle Utilities Analytics v2.5.2.0.1.

### Prerequisite Knowledge

Oracle Utilities Extractors and Schema and Oracle Utilities Analytics Dashboards use several technologies. You should have knowledge of the following before configuring and administering Oracle Utilities Analytics:

Oracle Data Warehouse:

http://docs.oracle.com/cd/E11882\_01/server.112/e25554/toc.htm

• Oracle Data Integrator:

http://docs.oracle.com/cd/E28280\_01/nav/odi.htm

• Oracle GoldenGate:

http://docs.oracle.com/goldengate/1212/gg-winux/index.html

• Oracle WebLogic Server:

http://docs.oracle.com/cd/E23943\_01/nav/wls.htm

• Oracle Business Intelligence Enterprise Edition:

http://docs.oracle.com/cd/E28280\_01/nav/bi.htm

### **Related Documents**

For more information, refer to the following documents in the Oracle Utilities Analytics documentation library:

- Oracle Utilities Analytics Getting Started Guide
- Oracle Utilities Analytics License Information User Guide
- Oracle Utilities Analytics Administration Guide
- Oracle Utilities Analytics Installation Guide
- Oracle Utilities Analytics Developer's Guide
- Oracle Utilities Analytics Release Notes
- Oracle Utilities Analytics Dashboards for Oracle Utilities Meter Data Analytics Metric Reference Guide
- Oracle Utilities Analytics Dashboards for Oracle Utilities Customer Analytics, Revenue Analytics, and Credit & Collections Analytics Metric Reference Guide
- Oracle Utilities Analytics Dashboards for Oracle Utilities Exception Analytics Metric Reference Guide
- Oracle Utilities Analytics Dashboards for Oracle Utilities Mobile Workforce Analytics Metric Reference Guide
- Oracle Utilities Analytics Dashboards for Oracle Utilities Distribution Analytics and Outage Analytics Metric Reference Guide
- Oracle Utilities Analytics Dashboards for Oracle Utilities Work and Asset Analytics Metric Reference Guide
- Oracle Utilities Analytics Dashboards for Oracle Utilities Operational Device Analytics Metric Reference Guide
- Oracle Utilities Extractors and Schema for Oracle Utilities Customer Care and Billing Data Mapping Guide
- Oracle Utilities Extractors and Schema for Oracle Utilities Meter Data Management Data Mapping Guide
- Oracle Utilities Extractors and Schema for Oracle Utilities Mobile Workforce Management Data Mapping Guide
- Oracle Utilities Extractors and Schema for Oracle Utilities Network Management System Data Mapping Guide
- Oracle Utilities Extractors and Schema for Oracle Utilities Operational Device Management Data Mapping Guide
- Oracle Utilities Extractors and Schema for Oracle Utilities Work & Asset Management Data Mapping Guide

#### 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.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

Convention	Meaning
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

### **Acronyms**

The list of acronyms used in this guide is as explained below:

- **APEX**: Oracle Application Express
- CC&B: Oracle Utilities Customer Care and Billing
- **CDC**: Changed Data Capture
- ELT: Extraction, Loading and Transformation
- ETL: Extraction, Transformation, and Loading
- MDM: Oracle Utilities Meter Data Management
- MWM: Oracle Utilities Mobile Workforce Management
- NMS: Oracle Utilities Network Management System
- OBIEE: Oracle Business Intelligence Enterprise Edition
- **ODI**: Oracle Data Integrator
- ODM: Oracle Utilities Operational Device Management
- OGG: Oracle GoldenGate
- **OUA**: Oracle Utilities Analytics
- **OWB**: Oracle Warehouse Builder
- WAM: Oracle Utilities Work and Asset Management

# **About Oracle Utilities Analytics**

This chapter provides an overview of the installation of Oracle Utilities Analytics. This includes:

- About Oracle Utilities Analytics Installation
- Installation Components

## **About Oracle Utilities Analytics Installation**

The installation of Oracle Utilities Analytics v2.5.2.0.1 is a full installation of Oracle Utilities Analytics. This means that you do not need to install any previous version Oracle Utilities Analytics before installing Oracle Utilities Analytics v2.5.2.0.1.

### **Installation Components**

Oracle Utilities Analytics (OUA) installation consists of the following components, each of which needs to be installed for a successful installation:

 Oracle Utilities Analytics Database component containing star schemas and product metadata

**Note:** See the Prerequisite Software for Oracle Utilities Analytics Database Component section in the Chapter 2: Preparing for Installation for the list of prerequisite software necessary for installing this component

• Oracle Utilities Analytics ELT component based on Oracle Data Integrator (ODI) containing pre-built Oracle Data Integrator objects necessary for the ELT processes.

**Note:** Oracle GoldenGate (OGG) is utilized to capture the data and this is required for Oracle Data Integrator based ELT.

**Note:** See the Prerequisite Software for Oracle Data Integrator Based ELT Component section in the Chapter 2: Preparing for Installation for the list of prerequisite software necessary for installing this component

 Oracle Utilities Analytics Administration Tool component is an Oracle Application Express application used to maintain several Oracle Utilities Analytics configuration parameters.

**Note:** See the Prerequisite Software for Oracle Utilities Analytics Administration Tool Component section in the Chapter 2: Preparing for Installation for the list of prerequisite software necessary for installing this component

Oracle Utilities Analytics Dashboard component contains the pre-built Oracle Business
Intelligence Enterprise Edition Web Catalog, RPD file and answers based on Oracle Business
Intelligence Enterprise Edition.

**Note**: See the Prerequisite Software for Oracle Utilities Analytics Dashboards Component section in the Chapter 2: Preparing for Installation for the list of prerequisite software necessary for installing this component.

**Note**: Oracle Utilities Analytics Dashboard component should be installed on the server where Oracle Business Intelligence Enterprise Edition is installed.

Oracle Utilities Analytics Dashboards also include the demo database with the pre-populated data that can be used for training or demonstration purposes. Refer to the Chapter 5: Installing Demo Database for the details.

# **Preparing for Installation**

This chapter provides information about planning Oracle Utilities Analytics (OUA) installation v2.5.2.0.1, including:

- Installation Checklist
- Prerequisite Software
- Deploying Oracle Utilities Analytics
- Operating Systems and Application Servers
- Supported Source Application Versions
- Additional Notes on the Supported Platforms

**Note**: In order to perform successful installation of the product, you must have experience of working on, or installing the following products:

- Oracle Database Server
- Oracle Business Intelligence Enterprise Edition
- Oracle Data Integrator
- Oracle GoldenGate
- Oracle Application Express feature of Oracle database

**Note**: Refer to the corresponding installation guide of these products before installing Oracle Utilities Analytics.

#### **Installation Checklist**

The following checklist guides you through the installation process for Oracle Utilities Analytics v2.5.2.0.1:

The details are provided in subsequent chapters for each of the below-listed step:

- Determine the installation type. The first step in the installation procedure is to determine the installation type based on the installation scenario. The following are the possible installation types:
  - Initial Installation, an installation from scratch.
  - Upgrade, an upgrade from an earlier version to Oracle Utilities Analytics v2.5.2.0.1.
  - Demo Installation, an installation with pre-populated demo data.
- 2. Install the prerequisite software.

  See Prerequisite Software for more details.
- 3. Ensure that you have downloaded the required Oracle Utilities Analytics components.

**Note**: Refer to the Chapter 3: Oracle Utilities Analytics Initial Installation for instructions regarding initial installation.

**Note**: For upgrading from an earlier version of Oracle Utilities Analytics to Oracle Utilities Analytics v2.5.2.0.1, refer to the Chapter 4: Upgrading Oracle Utilities Analytics.

Note: Refer to Chapter 5: Installing Demo Database for instructions about demo installation.

Perform the post-installation tasks and configure the application.

### **Prerequisite Software**

For installing Oracle Utilities Analytics v2.5.2.0.1, a few prerequisite software products need to be downloaded and installed. Download and install these software products as per the instructions provided in the respective installation documents.

**Note**: Ensure that the same Operating System (OS) user is used to install all software prerequisites and Oracle Utilities Analytics components.

The following sections describe the prerequisite software requirement Oracle Utilities Analytics:

- Prerequisite Software for Oracle Utilities Analytics Database Component
- Prerequisite Software for Oracle Utilities Analytics Installer
- Prerequisite Software for Oracle Data Integrator Based ELT Component
- Prerequisite Software for Oracle Utilities Analytics Administration Tool Component
- Prerequisite Software for Oracle Utilities Analytics Dashboards Component

### Prerequisite Software for Oracle Utilities Analytics Database Component

The prerequisite software for Oracle Utilities Analytics database component is as described below:

Oracle Database Server Enterprise Edition 12.1.0.2.0

Note: Oracle Utilities Analytics v2.5.2.0.1 is supported on Oracle Database Server Standard Edition 12.1.0.1.0 when using ELT component based on Oracle Data Integrator.

#### **Prerequisite Software for Oracle Utilities Analytics Installer**

The prerequisite software for Oracle Utilities Analytics Installer is as described below:

• JDK 1.7

#### Prerequisite Software for Oracle Data Integrator Based ELT Component

The prerequisite software products for Oracle Utilities Analytics ELT component based on Oracle Data Integrator (ODI) are listed below:

- JDK 1.6.0 (35)
- Oracle Database Server Enterprise Edition 12.1.0.2.0, or Oracle Database Server Standard Edition 12.1.0.1.0
- Oracle WebLogic 10.3.6
- Oracle Data Integrator 11.1.1.7 with Java EE
- Oracle GoldenGate on the source application database server and the target database server.
   This can be downloaded from Oracle Software Delivery Cloud (https://edelivery.oracle.com).
- Oracle Utilities Analytics Admin Tool

**Note:** Oracle Utilities Analytics Database Component must be installed before the installation of Oracle Utilities Analytics ELT Component Based on Oracle Data Integrator.

# Prerequisite Software for Oracle Utilities Analytics Administration Tool Component

Note: Applicable only if you use Oracle Data Integrator based ELT.

The prerequisite software products for the Oracle Utilities Analytics Administration Tool component are as follows:

- Oracle Database Server Enterprise Edition 12.1.0.2.0 or Oracle Database Server Standard Edition 12.1.0.1.0
- Oracle REST Data Services 3.0
- Oracle Apex 4.2.6

#### Prerequisite Software for Oracle Utilities Analytics Dashboards Component

The prerequisite software for Oracle Utilities Analytics Dashboard component is as follows:

Oracle Business Intelligence Enterprise Edition 11.1.1.7.1 (Install Oracle Business
Intelligence Enterprise Edition 11.1.1.7.0 and apply the patch 18818588) with the
Enterprise Install option.

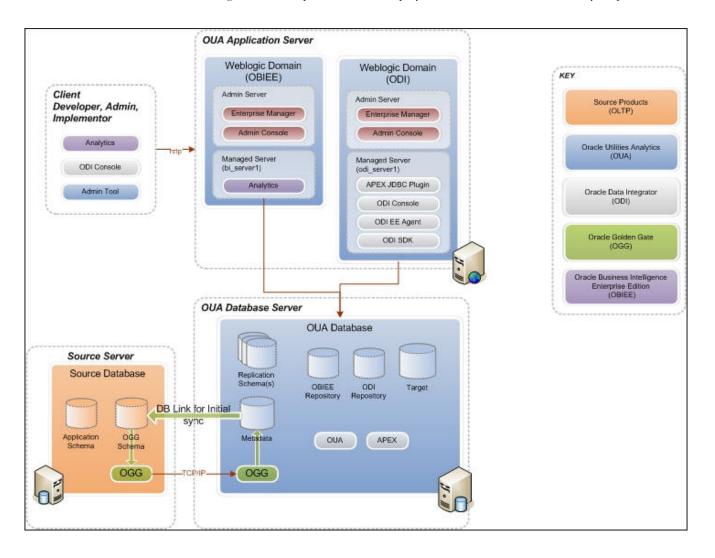
Note: Install the Oracle 12.1.0.2.0 client if Oracle Business Intelligence Enterprise Edition software is not installed on the database server. If Oracle Business Intelligence Enterprise Edition software is installed, then there is no need to install the Oracle client.

**Note:** After Oracle Business Intelligence Enterprise Edition installation, save a snapshot of the last page of Oracle Business Intelligence Enterprise Edition installation having details of BI Oracle Home, Instance Home, etc. These values will be used during the Oracle Utilities Analytics installation.

# **Deploying Oracle Utilities Analytics**

A standard deployment of the Oracle Utilities Analytics product consists of a database and an application server. Two Weblogic installations are performed on the application server, one for Oracle Business Intelligence Enterprise Edition and another for Oracle Data Integrator. And, Oracle GoldenGate is installed on the source database server and on the target database server.

The diagram below depicts a standard deployment of the Oracle Utilities Analytics product.



## **Operating Systems and Application Servers**

Oracle Utilities Analytics v2.5.2.0.1 installation is supported to operate on many operating system, application server, and database server combinations.

The following table details the minimum versions of the browser, operating system, and application server combinations on which Oracle Utilities Analytics v2.5.2.0.1 has been tested and supported:

Browser	Operating System (Client)	Operating System (Server)	Chipset	Application Server	Oracle Business Intelligence Enterprise Edition (OBIEE)	Oracle Data Integrator (ODI)	JDK	Oracle GoldenGate	Oracle REST Data Service	Database
	IE 11.x  Windows 7/8(64  Firefox 34.0ESR + (OBIEE only)	AIX 7.1 (64-bit)	Power 64-bit	WebLogic 10.3.6	11.1.1.7.1	11.1.1.7	1.6.0 2.4	12.1.2.1.1	3.0	Oracle 12.1.0.2.0
IE 11.x		Oracle Linux 6.5 (64-bit)	x86_64	WebLogic 10.3.6	11.1.1.7.1	11.1.1.7	1.6.0 (35)	12.1.2.1.0	3.0	Oracle 12.1.0.2.0
34.0ESR + (OBIEE		Oracle Solaris 11 (64-bit)	SPARC	WebLogic 10.3.6	11.1.1.7.1	11.1.1.7	1.6.0 (35)	12.1.2.1.0	3.0	Oracle 12.1.0.2.0
		Windows Server 2008 R2 (64-bit)	x86_64	WebLogic 10.3.6	11.1.1.7.1	11.1.1.7	1.6.0 (35)	12.1.2.1.0	3.0	Oracle 12.1.0.2.0

Important Note: For the latest system requirements and supported platforms details, refer to the knowledge article "System Requirements and Supported Platforms for Oracle Utilities Analytics v2.5.2" (Doc ID 2041305.1) available on My Oracle Support (https://support.oracle.com/).

**Important Note**: Oracle Utilities Analytics supports Oracle Data Integrator based ELT *only* from the following combination of source and target databases.

11g source --> 12c target

12c source --> 12c target

For Oracle Utilities Meter Data Management and Oracle Utilities Mobile Workforce Management source systems, make sure the source database is on Oracle Database Server 12c.

You must have the software listed below:

- Oracle Utilities Analytics version v2.5.2.0.1 is supported on Oracle Database Server Standard Edition 12.1.0.2.0 when using ELT component based on Oracle Data Integrator.
- Oracle Business Intelligence Enterprise Edition (OBIEE) 11g is required for Oracle Utilities Analytics Dashboards.
- Oracle Data Integrator, Oracle GoldenGate, Oracle WebLogic and Oracle Application
   Express are required for Oracle Utilities Analytics ELT component based on Oracle Data
   Integrator.

## **Supported Source Application Versions**

The following are the supported source application versions:

Source Application	Version
Oracle Utilities Customer Care and Billing	2.3.1 2.4.0.2 2.4.0.1 2.5.0
Oracle Utilities Network Management System	1.12.0.2 1.11.0.4.24
Oracle Utilities Work and Asset Management	1.9.1.2
Oracle Utilities Meter Data Management	2.1.0.3
Oracle Utilities Mobile Workforce Management	2.2.0.3
Oracle Real-Time Scheduler	2.2.0.3
Oracle Utilities Operational Device Management	2.0.1.2

**Note:** For the latest edge application version details, refer to the knowledge article "System Requirements and Supported Platforms for Oracle Utilities Analytics v2.5.2" (Doc ID 2041305.1) available on My Oracle Support (https://support.oracle.com/).

**Note:** Oracle Warehouse Builder based ETL is used for Oracle Utilities Work and Asset Management source application. If you are planning to use Oracle Utilities Work and Asset Management as a source application, contact Oracle Support personnel for detailed instructions on the installation process.

## Additional Notes on the Supported Platforms

The following topics are discussed in this section:

- Oracle Unbreakable Enterprise Kernel
- Oracle VM Support
- Oracle Support Policy on VMWare

### Oracle Unbreakable Enterprise Kernel

Oracle Utilities Analytics v2.5.2.0.1 is supported on Oracle Unbreakable Enterprise Kernel.

### **Oracle VM Support**

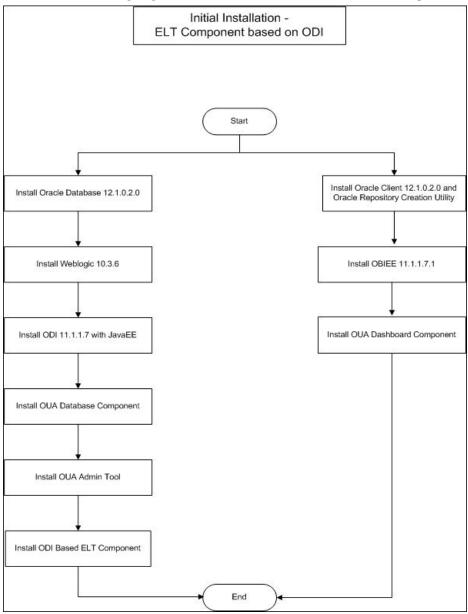
Oracle Utilities Analytics v2.5.2.0.1 is supported on Oracle VM Server for x86 3.3 for the supported releases of Oracle Linux and Microsoft Windows operating systems.

# **Oracle Support Policy on VMWare**

Refer to the knowledge base article ID 249212.1 on My Oracle Support (https://support.oracle.com) for Oracle's support policy on VMWare.

# **Oracle Utilities Analytics Initial Installation**

This installation type is applicable when installing Oracle Utilities Analytics for the first time, or from scratch. The following diagram shows the workflow for the initial installation process:



The prerequisite software for each of the component should be installed prior to installing each component.

**Note**: See the Prerequisite Software section in the Chapter 2: Preparing for Installation for the list of prerequisite software necessary for installing each component.

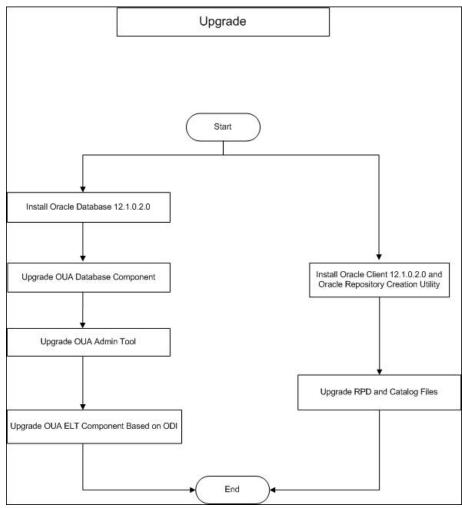
The following components are installed during an initial installation:

- Oracle Utilities Analytics Database Component
- Oracle Utilities Analytics ELT Component based on Oracle Data Integrator
- Oracle Utilities Analytics Administration Tool Component
- Oracle Utilities Analytics Dashboards Component

**Note**: Refer to the **Chapter 3**: **Oracle Utilities Analytics Initial Installation** in the *Oracle Utilities Analytics Installation Guide* for the steps involved in installing Oracle Utilities Analytics for the first time.

# **Upgrading Oracle Utilities Analytics**

This installation type is applicable when upgrading to Oracle Utilities Analytics v2.5.2.0.1 from an earlier version. The prerequisite software should be upgraded before upgrading the Oracle Utilities Analytics components. The following diagram shows the workflow for the upgrade process:



The prerequisite software for each of the component should be installed prior to installing each component.

**Note**: See the Prerequisite Software section of the Chapter 2: Preparing for Installation for the list of prerequisite software necessary for installing each component.

Note: Refer to the Supported Upgrade Paths section in the Chapter 4: Upgrading Oracle Utilities Analytics in the *Oracle Utilities Analytics Installation Guide* to find out how the upgrade of the particular product version is supported.

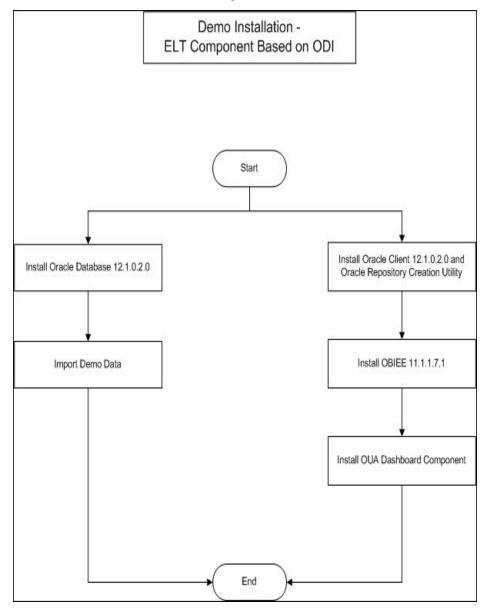
The following components are upgraded during an upgrade process:

- Oracle Utilities Analytics Database component
- Oracle Utilities Analytics ELT component based on Oracle Data Integrator
- Oracle Utilities Analytics Administration Tool Component
- Oracle Utilities Analytics Dashboard component

Note: Refer to the Chapter 4: Upgrading Oracle Utilities Analytics in the Oracle Utilities Analytics Installation Guide for the steps involved in upgrading each of the required components.

# **Installing Demo Database**

This installation type is applicable when installing the demo database component of Oracle Utilities Analytics Dashboards for demonstration, or training purposes. The following diagram shows the workflow for the demo installation process:



The following components are installed for a demo installation:

- Oracle Utilities Analytics Demo Database Component
- Oracle Utilities Analytics Dashboard Component

**Note**: See the Prerequisite Software section in the Chapter 2: Preparing for Installation for the list of prerequisite software necessary for installing each component.

### **Oracle Utilities Analytics Demo Database Component**

A fresh Oracle database 12.1.0.2.0 needs to be created, followed by a demo dump import.

**Note:** During the demo database import, there may be some warnings related to the external table creation if Oracle Utilities Analytics ETL component setup is not done. These can be ignored since Oracle Utilities Analytics ETL component setup is not a required step for Oracle Utilities Analytics demo database component installation.

## **Oracle Utilities Analytics Dashboard Component**

After installing the Oracle Utilities Analytics demo database component, install the Oracle Utilities Analytics dashboard component. It is assumed that Oracle Business Intelligence Enterprise Edition is installed and available before proceeding with this installation step. The installation steps for the dashboard component are the same as that for an initial install.

**Note**: Refer to the **Chapter 5**: **Demo Installation** in the *Oracle Utilities Analytics Installation Guide* that specifies database creation and demo dump import steps.