#### **Oracle Utilities Smart Grid Gateway**

Quick Install Guide Release 2.2.0 Service Pack 1 E80261-02

April 2017 (Updated July 2017)



Oracle Utilities Smart Grid Gateway Quick Install Guide

Copyright © 2000, 2017 Oracle and/or its affiliates. All rights reserved.

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

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

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

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/ or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

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

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

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

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

# Contents

Preface	. i
Related Documents	. i
Updates to Documentation	ii
Conventions	ii
Acronyms	ii
Additional Resources	iii

#### Chapter 1

ntroduction	. 1-1
Installation Overview	1-1
Installation Components	1-4
Installation Types	
Initial Installation	1-4
Demo Installation	1-5
Upgrade Installation	1-5
Media Pack Components	

#### Chapter 2

Supported Platforms and Hardware Requirements	2-1
Operating Systems and Application Servers	
Hardware Requirements	
Application Server Memory Requirements	
Support for Software Patches and Upgrades	2-4

#### Chapter 3

Planning the Installation	3-1
Before You Install	3-1
Prerequisite Oracle Utilities Application Framework Patches	3-1
Embedded vs Native/Clustered Installation	3-1
Application Server Clustering	3-2
Native Mode in WebLogic	3-2
Directory Names	3-2
Prerequisite Software List	3-2
Prerequisite Software for Database Server	3-2
Prerequisite Software for Application Server	3-3
Web Browser Requirements	
Installing Prerequisite Software	3-4
Readiness Checklist	3-4

Chapter 4	
Installing Oracle Utilities Smart Grid Gateway - Initial Installation	4-1
Initial Installation Procedure	. 4-1
Database Component Installation	. 4-1
Application Components Installation	. 4-2

Installing Oracle Utilities Smart Grid Gateway - Demo Installation	5-1
Demo Installation Procedure	. 5-1
Database Component Installation	. 5-1
Application Components Installation	. 5-2

#### Chapter 6

Upgrading Oracle Utilities Smart Grid Gateway	6-1
Before You Upgrade	
Upgrade Procedure	
Database Component Upgrade	
Application Components Upgrade	

#### Appendix A

Additional Information for Installing Other Oracle Software	. A-	-1
Oracle WebLogic		
Install the Oracle WebLogic license	. A-	1

## **Preface**

This guide provides an overview of installing Oracle Utilities Smart Grid Gateway and is intended for anyone interested in the installation process. This section includes:

- Related Documents
- Updates to Documentation
- Conventions
- Acronyms
- Additional Resources

To complete installation you should have:

- Administrative privileges on the host where you are installing the software.
- Experience installing and configuring application servers and other software.

#### **Related Documents**

The following documentation is included with this release.

#### Installation Guides and Release Notes

- Oracle Utilities Smart Grid Gateway Release Notes
- Oracle Utilities Smart Grid Gateway Quick Install Guide
- Oracle Utilities Smart Grid Gateway Installation Guide
- Oracle Utilities Smart Grid Gateway Database Administrator Guide
- Oracle Utilities Smart Grid Gateway Licensing Information User Manual

#### **Configuration and User Guides**

- Oracle Utilities Meter Data Management / Oracle Utilities Smart Grid Gateway V2.2.0 Service Pack 1 Business User Guide
- Oracle Utilities Meter Data Management / Oracle Utilities Smart Grid Gateway V2.2.0 Service Pack 1 Administrative User Guide

#### **Supplemental Documents**

- Oracle Utilities Smart Grid Gateway Server Administration Guide
- Oracle Utilities Smart Grid Gateway Security Guide

#### **Updates to Documentation**

Additional and updated information about the product is available from the **Knowledge Base** section of **My Oracle Support** (http://support.oracle.com). Please refer to **My Oracle Support** for more information. Documentation updates are also posted on the Oracle Technology Network documentation page as they become available (http://docs.oracle.com/cd/E72219\_01/documentation.html).

#### 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.
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 following acronyms and terms are used in this document:

Acronym	Definition
ADF	Oracle Application Development Framework
EAR	Enterprise Archive
EJB	Enterprise JavaBeans
HTML	HyperText Markup Language
JAR	Java Archive
JDBC	Java database connectivity
JMX	Java Management Extensions
JNDI	Java Naming and Directory Interface
JSP	JavaServer Pages
JVM	Java Virtual Machine.
MPL	Multi Purpose Listener
OUAF	Oracle Utilities Application Framework

Acronym	Definition
OAM	Oracle Access Manager
OIM	Oracle Identity Management
ONS	Oracle Notification Service
OSB	Oracle Service Bus
Oracle RAC FCF	Oracle Real Application Clusters Fast Connection Failover
RMI	Remote Method Invocation
SOAP	Simple Object Access Protocol
SOA	Service-oriented architecture
SPLEBASE	The location where the application will be installed.
SPLOUTPUT	This location is used for storing batch log files and output from batch jobs
WAR	Web application Archive
WLS	WebLogic
XAIApp	XML Application Integration

## **Additional Resources**

For more information and support, visit the Oracle Support Web site at: http://www.oracle.com/support/index.html

# Introduction

This chapter provides an overview of the Oracle Utilities Smart Grid Gateway product and installation process. It contains the following sections:

- Installation Overview
- Installation Components
- Installation Types
- Media Pack Components

## Installation Overview

This section provides a high-level overview of the installation steps for Oracle Utilities Smart Grid Gateway (SGG) V2.2.0.1.0 and selected additional software. For more information, see Oracle Utilities Smart Grid Gateway *Installation Guide*.

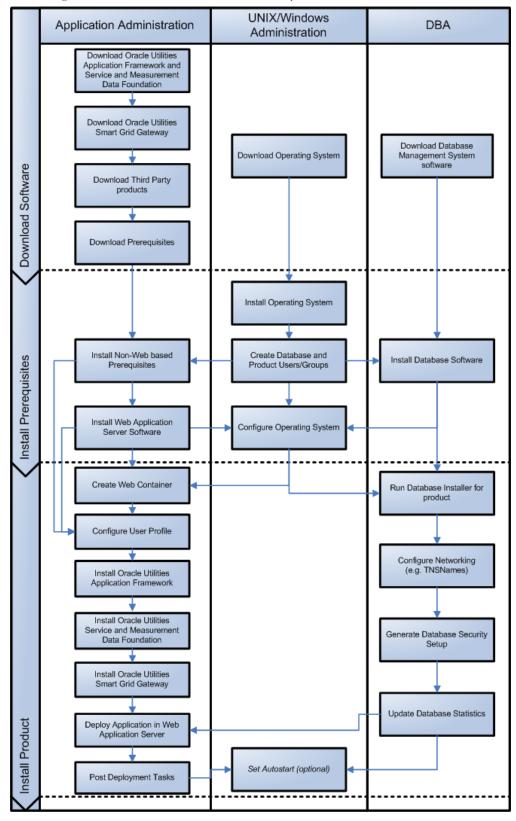
#### To install Oracle Utilities Smart Grid Gateway:

- 1. Install all required third-party software.
- 2. Install database. See Oracle Utilities Smart Grid Gateway *Database Administrator Guide* for complete details.

**Note**: When implementing Oracle Utilities Smart Grid Gateway with Oracle Utilities Meter Data Management, both the Smart Grid Gateway and Meter Data Management database components should be installed in the same database.

- 3. Install Oracle Utilities Application Framework (Application server only).
- 4. Install Oracle Utilities Application Framework Single Fixes.
- 5. Install Oracle Utilities Service and Measurement Data Foundation (Application server only).
- 6. Install Oracle Utilities Smart Grid Gateway V2.2.0.1.0 Adapter Components (Application server only).
  - MV90 Adapter for Itron
  - Adapter Development Kit
  - Adapter for Networked Energy Services

- Adapter for Itron OpenWay
- Adapter for Landis+Gyr
- Adapter for Sensus RNI
- Adapter for Silver Spring Networks
- 7. Install Oracle Utilities Service Order Management Components.
- 8. Generate Application Viewer items (this includes the Data Dictionary).



The following diagram provides an overview of the steps that need to be taken to install and configure Oracle Utilities Smart Grid Gateway:

Refer to My Oracle Support for up-to-date additional information on Oracle Utilities Smart Grid Gateway installation.

#### Installation Components

The Oracle Utilities Smart Grid Gateway product installation consists of the following components:

- Database Components
  - Oracle Utilities Application Framework database
  - Oracle Utilities Service and Measurement Data Foundation database
  - Oracle Utilities Smart Grid Gateway database
- Application Components
  - Oracle Utilities Application Framework application
  - Oracle Utilities Service and Measurement Data Foundation application
  - Oracle Utilities Smart Grid Gateway application

For a successful installation, you must install ALL of the above components.

## **Installation Types**

The first step in the installation procedure is to determine the installation type that meets your business requirements. The following are the possible installation types:

- Initial Installation A base installation, typically used for a production environment.
- Demo Installation A base installation with pre-populated demo data, typically used for demonstration or training purposes.
- Upgrade Installation An upgrade installation from version 2.1.0.3.0 and 2.2.0.0.0 to version 2.2.0.1.0.

## **Initial Installation**

This installation type is applicable when installing Oracle Utilities Smart Grid Gateway for the first time or from scratch. For an initial install, you must install all of the following components:

• Database components

Refer to the "Initial Install" section of the Oracle Utilities Smart Grid Gateway Database Administrator Guide for more information.

- Application components
  - Oracle Utilities Application Framework application
  - Oracle Utilities Application Framework Single Fix Pre-Requisite Rollup for Oracle Utilities Service and Measurement Data Foundation
  - Oracle Utilities Service and Measurement Data Foundation application
  - Oracle Utilities Smart Grid Gateway application

See Installing Oracle Utilities Smart Grid Gateway - Initial Installation for the instructions for installing these components.

#### **Demo Installation**

This installation type is applicable when installing a demo application of Oracle Utilities Smart Grid Gateway for demonstration or training purposes. For a demo install, you must install all of the following components:

Demo Database components

Refer to the "Demo Install" section of the Oracle Utilities Smart Grid Gateway Database Administrator's Guide for more information.

- Application components
  - Oracle Utilities Application Framework application
  - Oracle Utilities Application Framework Single Fix Pre-Requisite Rollup for Oracle Utilities Service and Measurement Data Foundation
  - Oracle Utilities Service and Measurement Data Foundation application
  - Oracle Utilities Smart Grid Gateway application

See Installing Oracle Utilities Smart Grid Gateway - Demo Installation for the instructions for installing these components.

#### **Upgrade Installation**

This installation type is applicable when upgrading Oracle Utilities Smart Grid Gateway from version 2.1.0.3.0 and 2.2.0.0.0 to version 2.2.0.1.0. For an upgrade, you must upgrade all of the following components:

Database components

Refer to the "Upgrade Install" section of the Oracle Utilities Smart Grid Gateway Database Administrator Guide for more information.

- Application components
  - Oracle Utilities Application Framework application
  - Oracle Utilities Application Framework Single Fix Pre-Requisite Rollup for Oracle Utilities Service and Measurement Data Foundation
  - Oracle Utilities Service and Measurement Data Foundation application
  - Oracle Utilities Smart Grid Gateway application

See Upgrading Oracle Utilities Smart Grid Gateway for the instructions for installing these components.

#### Media Pack Components

The Oracle Utilities Smart Grid Gateway Base Media Pack consists of the following packages:

- Oracle Utilities Smart Grid Gateway V2.2.0.1.0 Release Notes
- Oracle Utilities Smart Grid Gateway V2.2.0.1.0 Quick Install Guide
- Oracle Utilities Smart Grid Gateway V2.2.0.1.0 Install Documentation
- Oracle Utilities Smart Grid Gateway V2.2.0.1.0 User Documentation

- Oracle Utilities Smart Grid Gateway V2.2.0.1.0 Supplemental Documentation
- Oracle Utilities Application Framework V4.3.0 Service Pack 4 Multiplatform
- Oracle Utilities Application Framework V4.3.0 Service Pack 4 Single Fix Prerequisite Rollup for SMDF V2.2.0.1.0
- Oracle Utilities Service and Measurement Data Foundation V2.2.0.1.0
   Multiplatform
- Oracle Utilities Smart Grid Gateway V2.2.0.1.0 Oracle Database Multiplatform

The Oracle Utilities Smart Grid Gateway MV-90 Adapter for Itron Media Pack consists of the following additional packages:

- Oracle Utilities Smart Grid Gateway MV-90 Adapter for Itron V2.2.0.1.0 User Documentation
- Oracle Utilities Smart Grid Gateway MV-90 Adapter for Itron V2.2.0.1.0 Multiplatform

The Oracle Utilities Smart Grid Gateway Adapter Development Kit Media Pack consists of the following additional components:

- Oracle Utilities Smart Grid Gateway Adapter Development Kit V2.2.0.1.0 User Documentation
- Oracle Utilities Smart Grid Gateway Adapter Development Kit V2.2.0.1.0
   Multiplatform

The Oracle Utilities Smart Grid Gateway Adapter for Networked Energy Services Media Pack consists of the following additional components:

- Oracle Utilities Smart Grid Gateway Adapter for Networked Energy Services V2.2.0.1.0 User Documentation
- Oracle Utilities Smart Grid Gateway Adapter for Networked Energy Services V2.2.0.1.0 Multiplatform

The Oracle Utilities Smart Grid Gateway Adapter for Itron OpenWay Media Pack consists of the following additional components:

- Oracle Utilities Smart Grid Gateway Adapter for Itron OpenWay V2.2.0.1.0 User Documentation
- Oracle Utilities Smart Grid Gateway Adapter for Itron OpenWay V2.2.0.1.0
   Multiplatform

The Oracle Utilities Smart Grid Gateway Adapter for Landis+Gyr Media Pack consists of the following additional components:

Oracle Utilities Smart Grid Gateway Adapter for Landis+Gyr V2.2.0.1.0 User
 Documentation

Oracle Utilities Smart Grid Gateway Adapter for Landis+Gyr V2.2.0.1.0
 Multiplatform

The Oracle Utilities Smart Grid Gateway Adapter for Sensus RNI Media Pack consists of the following additional components:

- Oracle Utilities Smart Grid Gateway Adapter for Sensus RNI V2.2.0.1.0 User
   Documentation
- Oracle Utilities Smart Grid Gateway Adapter for Sensus RNI V2.2.0.1.0
   Multiplatform

The Oracle Utilities Smart Grid Gateway Adapter for Silver Spring Networks Media Pack consists of the following additional components:

- Oracle Utilities Smart Grid Gateway Adapter for Silver Spring Networks V2.2.0.1.0 User Documentation
- Oracle Utilities Smart Grid Gateway Adapter for Silver Spring Networks V2.2.0.1.0 Multiplatform

The Oracle Utilities Smart Grid Gateway Service Order Management Media Pack consists of the following additional components:

- Oracle Utilities Smart Grid Gateway Service Order Management V2.2.0.1.0 User
   Documentation
- Oracle Utilities Smart Grid Gateway Integration for MWM-SOM Release V2.2.0.1.0
- Oracle Utilities Smart Grid Gateway Integration for CC&B-SOM Release V2.2.0.1.0

# Supported Platforms and Hardware Requirements

This section provides an overview of the tiers on which the product is implemented, and shows each of the operating system/server combinations that the product is certified for, including:

- Operating Systems and Application Servers
- Hardware Requirements
- Application Server Memory Requirements
- Support for Software Patches and Upgrades

#### **Operating Systems and Application Servers**

This section provides information on the operation system, web browser and OSB and SOA adapter combinations that are supported. Please refer to the notes below the table for additional details regarding WebLogic support.

The table below details the MINIMUM operating system and application server combinations on which this version of Oracle Utilities Smart Grid Gateway is supported.

Operating System and Web Browser (Client)	Operating System (Server)	Chipset	Application Server	Database
Microsoft Windows OS 7, 8.1, 10 (Internet Explorer 11, Firefox ESR 45) *OSB Adapters	AIX 7.1 TL01+ AIX 7.2 TL00+	POWER	WebLogic 12.1.3.0+ WebLogic 12.2.1.1+ WebLogic 12.2.1.0	Oracle 12.1.0.1+
	Oracle Linux 6.5+, 7.x (based on Red Hat Enterprise Linux )*	x86_64	WebLogic 12.1.3.0+ WebLogic 12.2.1.1+ WebLogic 12.2.1.0	Oracle 12.1.0.1+
*SOA Adapters ((Not applicable for MV90 Adapter for Itron)	Oracle Solaris 11	SPARC	WebLogic 12.1.3.0+ WebLogic 12.2.1.1+ WebLogic 12.2.1.0	Oracle 12.1.0.1+
	Windows Server 2012 R2 (Not supported in production)	x86_64	WebLogic 12.1.3.0+ WebLogic 12.2.1.1+ WebLogic 12.2.1.0	Oracle 12.1.0.1+

Refer to the Product Support Matrix (Doc ID 1454143.1) on Oracle Support to determine if support for newer versions of the listed products have been added.

Please note the following:

• Version numbers marked with a "+" are the MINIMUM version supported. That version and all future 4th digit updates will be supported.

**Example**: Oracle 12.1.0.1+ means that 12.1.0.1 and any higher 12.1.0.x versions of Oracle are supported.

\* An "x" indicates that any version of the digit designed by the "x" is supported.

**Example**: Linux 7.x indicates that any version of Linux 7 (7.0, 7.1, 7.2 etc) will be supported.

#### Windows Server

Windows Server is **not** supported for Production environments. Wherever
Windows Server is referenced within this guide, it is supported for Test or
Development environments **only**.

#### WebLogic Server

• WebLogic Server Standard and Enterprise Edition 10.3.6 are supported for both embedded and native installations. Starting at Weblogic 12.2.\*, embedded

installations will be not be supported. Only the native installation will be supported.

- WebLogic Server Enterprise Edition is required if using application clustering.
- Although Oracle Utilities Smart Grid Gateway is supported only on the Oracle WebLogic application server, it can write to any JMS compliant queuing application by way of Oracle Service Bus. For more information about Oracle Service Bus, refer to the Oracle Fusion Middleware Developers Guide for Oracle Service Bus.
- \*\*OSB and SOA Adapters are only supported on WebLogic version 12.2.1.0. The browser version supports versions 12.1.3.0+ and 12.2.1.1+.
- Oracle Utilities Service Order Management is only supported on WebLogic version 12.1.3.0+.
- Customers must download Oracle WebLogic Server from the Oracle Software Delivery Cloud.

#### **Oracle Database Server**

The following Oracle Database Server editions are supported:

- Oracle Database Enterprise Edition
- Oracle Database Standard Edition

**Note**: Oracle Database Enterprise Edition and the Partitioning and Advanced Compression options are strongly recommended in all situations.

#### **Oracle VM Support**

This version of Oracle Utilities Smart Grid Gateway is supported on Oracle VM Server for x86 for supported releases of Oracle Linux and Microsoft Windows operating systems.

Refer to My Oracle Support knowledge base article 249212.1 for Oracle's support policy on VMWare.

#### **Hardware Requirements**

This section provides information on client side hardware requirements for Oracle Utilities Smart Grid Gateway.

Configuration	Processor	Memory (RAM)	Monitor (Display)
Minimum	Pentium IV - 2.0 GHz	1024 MB	1024X768** 16-bit Color
Recommended*	Pentium IV -3.0+ GHz, (or) any Core 2 Duo (or) any Athlon X2	2048 MB	1280X1024** 32-bit Color

\* The Recommended configuration supports better performance of the client.

\*\* To reduce the amount of scrolling required for pages that are longer than 768 or 1024 pixels, consider placing a monitor into vertical position (with narrow side on the bottom).

#### **Application Server Memory Requirements**

For each application server environment a minimum of 4 GB of real memory is required, plus 6 GB of swap space. The approximate disk space requirements in a standard installation are as follows (the size represents the MINIMUM required):

Location	Size	Usage	
Install Dir Location	5 GB minimum	This is the location where the application and framework get installed. Startup, shutdown and other online log files are stored here. The size and space that is used should be monitored because various debugging options can significantly affect the size of log files.	
Log Location	2 GB minimum	This location is used for storing batch log files and output from batch jobs. The size of this space should be influenced by which batches are run and how often, and the amount of debugging information that is collected.	
Location of the application web work files on the web servers	1.5 GB minimum	This location is used by various web server vendors to expand the application. It should be considered when installing these products. Refer to the individual web server documentation to determine the location of the temporary files.	
Installation Temporary Area	4 GB	The application gets installed from this location. You need enough space to un- compress the files and install the application.	
Oracle Data Area	4 GB minimum	This location is where the Oracle database data files are stored. The size of this space should be based on the requirements of the production environment. For an initial or demo database install 4 GB should be sufficient.	

### Support for Software Patches and Upgrades

Due to the ongoing nature of software improvement, vendors will periodically issue patches and service packs for the operating systems, application servers and database servers on top of specific versions that Oracle products have already been tested against. If it is necessary to apply an upgrade, please do so in a test environment that is running on the same platform as your production environment prior to updating the production environment itself.

The exception to this rule is Hibernate software version 4.1.0. This version should not be upgraded.

Always contact Oracle Support prior to applying vendor updates that do not guarantee backward compatibility.

# **Planning the Installation**

This chapter provides information for planning an Oracle Utilities Smart Grid Gateway installation, including:

- Before You Install
- Prerequisite Software List
- Installing Prerequisite Software
- Readiness Checklist

#### **Before You Install**

Refer to My Oracle Support for up-to-date additional information about installing Oracle Utilities Smart Grid Gateway.

#### Prerequisite Oracle Utilities Application Framework Patches

Oracle Utilities Application Framework patches must be installed prior to installing Oracle Utilities Smart Grid Gateway. Refer to the Oracle Utilities Work and Asset Management or Oracle Utilities Operational Device Management Release Notes for more information.

#### **Embedded vs Native/Clustered Installation**

By default, Oracle Utilities Application Framework uses Oracle WebLogic in embedded mode. This means the Oracle WebLogic installation is essentially pointed to the product installation and the executables of Oracle WebLogic are only used to execute the code. This has the advantage of being simple and quick to implement with the Oracle Utilities Application Framework generating a simple configuration for Oracle WebLogic to use.

If you want to take advantage of more advanced WebLogic features such as high performance (multiple managed servers) and high availability (clustering) configuration, do not use the embedded install. Rather, use the native/clustered installation which allows you to deploy the Oracle Utilities Application Framework JEE components within Oracle WebLogic, as you would with other JEE applications.

#### **Application Server Clustering**

If you are considering application server clustering, refer to the following whitepaper, available on My Oracle Support, for additional information:

- Implementing Oracle ExaLogic and/or Oracle WebLogic Clustering (Doc ID: 1334558.1)
- Additional information about Weblogic clustering can be found at http:// docs.oracle.com/cd/E17904\_01/web.1111/e13709/toc.htm.

#### Native Mode in WebLogic

If you plan on using the Oracle Utilities Application Framework in native mode within Oracle WebLogic (as opposed to embedded mode), refer to the whitepaper titled: "Native Installation Oracle Utilities Application Framework (Doc Id: 1544969.1) on My Oracle Support.

#### **Directory Names**

Directory cannot contain whitespace characters.

## **Prerequisite Software List**

Before you install Oracle Utilities Smart Grid Gateway, you must install prerequisite software.

Refer to the respective installation documentation of the software for instructions on downloading and installing.

#### Prerequisite Software for Database Server

The prerequisite software for the database component of Oracle Utilities Smart Grid Gateway is as follows:

- Oracle Database Server 12.1.0.1+ This is required for installing the database component of the Oracle Utilities Smart Grid Gateway product. The following version of the database server is supported:
  - Oracle Database Enterprise Edition

**Note:** Oracle Database Enterprise Edition and the Partitioning and Advanced Compression options are strongly recommended in all situations.

#### **Prerequisite Software for Application Server**

The prerequisite software for the application component of Oracle Utilities Smart Grid Gateway is as follows:

- Oracle Database 12c Client
- JDK 1.8.0\_102+ (64-bit)
- Oracle WebLogic 12c (12.1.3.0+) or Oracle WebLogic 12c (12.2.1.1+)

**Note**: For 12.2.1.1+, only WebLogic Fusion Middleware Infrastructure Installer should be used.

- Hibernate 4.1.0 Final, Hibernate 5.5.4 Final
- Oracle Service Bus 12.2.1.0

Oracle Service Bus is required for an implementation that plans to use a productized adapter or the Adapter Development Kit to process meter reading or device event data.

**Note:** Oracle Service Bus 12.2.1.0 requires Oracle WebLogic Server 12.2.1.0

• Oracle SOA Suite 12.2.1.0

Oracle SOA Suite (specifically, BPEL Process Manager) is required for an implementation that plans to use a productized adapter or the Adapter Development Kit to implement twoway communications for processing meter commands.

**Note:** Oracle SOA Suite 12.2.1.0 requires Oracle WebLogic Server (12.2.1.0).

Oracle Utilities Service Order Management only supports Oracle Service Bus/Oracle SOA Suite 12.2.1.0

#### Oracle Security Fix Updates

It is recommended that you keep the Oracle prerequisite software up to date with the latest security fixes provided by Oracle.

#### Web Browser Requirements

The web browsers listed below are supported when used on each of the operating systems indicated:

Browsers	Windows OS
Internet Explorer 11 Firefox ESR 45	Microsoft Windows OS 7, 8.1, 10 (64-bit)

### **Installing Prerequisite Software**

Refer to the section "Installing Prerequisite Software" in the Oracle Utilities Smart Grid Gateway *Installation Guide* for detailed instructions on installing the prerequisite software.

#### **Readiness Checklist**

The following checklist will guide you through the installation process of Oracle Utilities Smart Grid Gateway. The details for each step are presented in the *Oracle Utilities Smart Grid Gateway Installation Guide*.

- 1. Confirm recommended hardware is ready. Refer to **Supported Platforms and Hardware Requirements** for more details.
- 2. Install prerequisite software, refer to Prerequisite Software List for more details.
- 3. Ensure that you have downloaded Oracle Utilities Smart Grid Gateway v2.2.0.1.0 components.
- 4. Go through the installation and configuration worksheets to understand the configuration menu.
- 5. Determine type of the installation:
  - **Initial Installation** For initial installation follow the instructions mentioned in *Oracle Utilities Smart Grid Gateway Installation Guide*.
  - **Demo Installation** For demo installation follow the instructions mentioned in *Oracle Utilities Smart Grid Gateway Installation Guide*.
  - **Upgrade Installation** For upgrade installation follow the instructions mentioned in *Oracle Utilities Smart Grid Gateway Installation Guide*.
- 6. Perform post-installation tasks.

## Installing Oracle Utilities Smart Grid Gateway - Initial Installation

This chapter provides an overview of installing Oracle Utilities Smart Grid Gateway from scratch. This chapter includes:

- Before You Install
- Initial Installation Procedure

#### **Before You Install**

Refer to My Oracle Support for up-to-date additional information on Oracle Utilities Smart Grid Gateway.

#### **Initial Installation Procedure**

The initial installation procedure consists of:

- Database Component Installation
- Application Components Installation

#### **Database Component Installation**

Installation of the database component of Oracle Utilities Smart Grid Gateway must be complete before you can proceed with the following sections. Refer to the section "Initial Install" of the Oracle Utilities Smart Grid Gateway Database Administrator's Guide, which provides instructions on installing the database component.

**Note**: When implementing Oracle Utilities Smart Grid Gateway with Oracle Utilities Meter Data Management, both the Smart Grid Gateway and Meter Data Management database components should be installed in the same database.

### **Application Components Installation**

Refer to the chapter "Installing Oracle Utilities Smart Grid Gateway - Initial Installation" of the Oracle Utilities Smart Grid Gateway Installation Guide, which provides instructions on installing the application components.

## Installing Oracle Utilities Smart Grid Gateway - Demo Installation

This chapter provides an overview of the instructions for setting up a demo application of Oracle Utilities Smart Grid Gateway useful for demonstration or training purposes. This chapter includes:

- Before You Install
- Demo Installation Procedure

#### **Before You Install**

Refer to My Oracle Support for up-to-date additional information on Oracle Utilities Smart Grid Gateway.

## **Demo Installation Procedure**

The demo installation procedure consists of:

- Database Component Installation
- Application Components Installation

#### **Database Component Installation**

Installation of the database component of Oracle Utilities Smart Grid Gateway must be complete before you can proceed with the following sections. Refer to the section "**Demo Install**" of the *Oracle Utilities Smart Grid Gateway Database Administrator Guide*, which provides instructions on installing the database component with pre-populated demo data.

**Note**: When implementing Oracle Utilities Smart Grid Gateway with Oracle Utilities Meter Data Management, both the Smart Grid Gateway and Meter Data Management database components should be installed in the same database.

### **Application Components Installation**

Refer to the chapter "Installing Oracle Utilities Smart Grid Gateway - Demo Installation" of the Oracle Utilities Smart Grid Gateway Installation Guide, which provides instructions on installing the application components.

## Upgrading Oracle Utilities Smart Grid Gateway

This chapter provides an overview of upgrading Oracle Utilities Smart Grid Gateway from version 2.1.0.3.0 and 2.2.0.0.0 to version 2.2.0.1.0.

This chapter includes:

- Before You Upgrade
- Upgrade Procedure

## **Before You Upgrade**

Review the list of operating system, application server and database server combinations that Oracle Utilities Smart Grid Gateway is certified to operate on, in the chapter Supported Platforms and Hardware Requirements.

For further assistance, contact My Oracle Support before you upgrade.

## **Upgrade Procedure**

The initial installation procedure consists of:

- Database Component Upgrade
- Application Components Upgrade

#### **Database Component Upgrade**

Upgrade of the database component of Oracle Utilities Smart Grid Gateway must be complete before you can proceed with the following sections. Refer to the chapter "**Upgrade Install**" of the *Oracle Utilities Smart Grid Gateway Database Administrator Guide*, which provides instructions on upgrading the database component.

**Note**: When implementing Oracle Utilities Smart Grid Gateway with Oracle Utilities Meter Data Management, both the Smart Grid Gateway and Meter Data Management database components should be installed in the same database.

## **Application Components Upgrade**

Refer to the chapter "**Upgrading** Oracle Utilities Smart Grid Gateway" of the *Oracle Utilities Smart Grid Gateway Installation Guide*, which provides instructions on installing the application components.

# Appendix A

## Additional Information for Installing Other Oracle Software

Please read this section and the follow directions if you purchased a license from Oracle for Oracle WebLogic.

## **Oracle WebLogic**

Customers must download Oracle WebLogic Server from the Oracle Software Delivery Cloud. The version of Oracle WebLogic Server is in the Oracle Utilities Smart Grid Gateway Supported Platforms Summary section.

**Note:** If you install a temporary license for Oracle WebLogic, please note that this license is limited to 5 non-current users. You will need to install the full license.

#### Install the Oracle WebLogic license

To apply a full license you will need to complete the following steps:

- 1. The license keys for Oracle WebLogic products are located at: http://licensecodes.oracle.com/bea.html
- 2. The following products are supported: Oracle WebLogic Server Standard Edition and Oracle WebLogic Server Enterprise Edition.
- 3. At the time of release of this document the license key on the web site for Oracle WebLogic Server Standard Edition is BEA WebLogic Server Advantage Edition.

The license key for Oracle WebLogic Server Enterprise Edition on the web site is BEA WebLogic Server Premium Edition.

- 4. Shut down the Oracle Utilities Smart Grid Gateway application server.
- 5. Follow the instructions from the Oracle WebLogic installation document to install the license key.
- 6. Start the Oracle Utilities Smart Grid Gateway application server.