

Oracle Real-Time Scheduler

Quick Install Guide

Release 2.3.0 Service Pack 2

E91555-01

February 2018

Oracle Real-Time Scheduler Quick Install Guide Release 2.3.0 Service Pack 2

Copyright © 2000, 2018 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-i
Audience	i-i
Related Documents	i-i
Conventions.....	i-ii
Chapter 1	
Overview	1-1
Installation Types.....	1-2
Media Pack Components.....	1-2
Contacting Oracle Support	1-2
Chapter 2	
Architecture Overview	2-1
Application Architecture	2-1
Tier 1: Desktop/Client, or Presentation Tier	2-1
Tier 2: Mobile Client Tier	2-1
Tier 3: Web Application / Business Application Server, or Business Logic Tier.....	2-1
Tier 4: Database, or Persistence Tier	2-1
Chapter 3	
Supported Platforms and Hardware Requirements	3-1
Software and Hardware Considerations.....	3-1
Operating Systems and Application Servers.....	3-2
Hardware Requirements	3-3
Application Server Memory Requirements	3-5
Supported Platforms for the Java-based Mobile Client.....	3-6
Support for Software Patches and Upgrades	3-8
Chapter 4	
Planning the Installation	4-1
Installation and Configuration Overview	4-2
Before You Install	4-3
Before You Upgrade	4-3
Installing Prerequisite Third-Party Software	4-3
Installation Readiness Checklist	4-4
Chapter 5	
Overview of Initial Installation	5-1
Initial Installation Procedure.....	5-2
Database Component Installation	5-2
Application Components Installation.....	5-3
Chapter 6	
Overview of Upgrade Installation	6-1
Upgrade Installation Procedure.....	6-2
Database Component Upgrade.....	6-2
Application Components Upgrade.....	6-3
Mobile Client Upgrade	6-3

Chapter 7

Overview of Demo Installation	7-1
Demo Installation Procedure.....	7-2
Database Component Installation	7-2
Application Components Installation.....	7-3

Preface

This guide provides an overview of installing Oracle Real-Time Scheduler.

For complete and detailed installation instructions, refer to the *Oracle Real-Time Scheduler Server Application Installation Guide*.

This preface contains these topics:

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

Audience

This guide is intended for anyone interested in the process of installing Oracle Real-Time Scheduler.

Related Documents

The following is the complete set of documentation available with this release.

Installation, Configuration, and Release Notes

- *Oracle Real-Time Scheduler Release Notes*
- *Oracle Real-Time Scheduler Quick Install Guide*
- *Oracle Real-Time Scheduler Server Application Installation Guide*
- *Oracle Real-Time Scheduler DBA Guide*
- *Oracle Real-Time Scheduler Hybrid Mobile Application Installation and Deployment Guide*

User Guides

- *Oracle Real-Time Scheduler Administrative User Guide*
- *Oracle Real-Time Scheduler Business User Guide*
- *Oracle Real-Time Scheduler Mobile Application User's Guide (Java-based)*
- *Oracle Real-Time Scheduler Hybrid Mobile Application User's Guide*
- *Oracle Real-Time Scheduler Hybrid Mobile Contractor Application User's Guide*

Map Editor Installation and User Guides

- *Oracle Real-Time Scheduler Map Editor User's Guide*

-
- *Oracle Real-Time Scheduler Map Editor Installation Guide*

Supplemental Documents

- *Oracle Real-Time Scheduler Server Administration Guide*
- *Oracle Real-Time Scheduler Security 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.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Chapter 1

Overview

This chapter provides an overview of the installation of Oracle Real-Time Scheduler.

This chapter includes information on the following:

- [Installation Types](#)
- [Media Pack Components](#)
- [Contacting Oracle Support](#)

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 for v2.3.0.2.
- **Upgrade Installation**- an upgrade installation to v2.3.0.2.
- **Demo Installation** - a base installation with pre-populated demo data, typically used for demonstration or training purposes for v2.3.0.2

For complete installation instructions pertinent to these installation types, please refer to the *Oracle Real-Time Scheduler Server Application Installation Guide*.

Media Pack Components

Documentation Packages

- Oracle Real-Time Scheduler v2.3.0.2 Release Notes
- Oracle Real-Time Scheduler v2.3.0.2 Quick Install Guide
- Oracle Real-Time Scheduler v2.3.0.2 Install Documentation
- Oracle Real-Time Scheduler v2.3.0.2 User Documentation
- Oracle Real-Time Scheduler v2.3.0.2 Supplemental Documentation

Installation Packages

- Oracle Utilities Application Framework 4.3.0 Service Pack 4 (v4.3.0.4)
- Oracle Utilities Application Framework v4.3.0.4 Single Fix Prerequisite Rollup for Oracle Real-Time Scheduler v2.3.0.2
- Oracle Real-Time Scheduler v2.3.0.2 Multiplatform
- Mobile Communication Client v2.3.0.2 for Windows
- Mobile Communication Client v2.3.0.2 for Android
- Oracle Real-Time Scheduler v2.3.0.2 Oracle Database
- Oracle Real-Time Scheduler v2.3.0.2 MapEditor

Contacting Oracle Support

Please follow this link <http://www.oracle.com/support/index.html> to contact Oracle Support.

For a list of available maintenance releases and patches, refer to article ID 1270044.1 on MyOracle Support.

Chapter 2

Architecture Overview

This section provides an overview of the Oracle Real-Time Scheduler application architecture.

Application Architecture

The Oracle Real-Time Scheduler application is deployed on multiple tiers.

Please see the *Oracle Real-Time Scheduler Server Administration Guide* for a more detailed description of the application architecture and individual tiers.

Tier 1: Desktop/Client, or Presentation Tier

This tier is implemented in a browser-based client. Users use a desktop client web browser to log in to and use the Oracle Real-Time Scheduler application. Note also that a desktop machine running Microsoft Windows and the Oracle client is required to perform some of the product installation steps.

Tier 2: Mobile Client Tier

This tier is implemented on mobile computers such as laptops and handhelds. Users can install the mobile client software to use the mobile functionality of Oracle Real-Time Scheduler.

Tier 3: Web Application / Business Application Server, or Business Logic Tier

This tier is implemented in a web application or business application server. The business application component can be installed as part of the web application server, or as a separate component. Except where explicitly noted, most of the Oracle Real-Time Scheduler installation documentation assumes that the web application and business application servers reside together.

Tier 4: Database, or Persistence Tier

This tier is implemented in a database server. The database server stores data maintained by the Oracle Real-Time Scheduler application. More specifically, the database tier contains the data server files and database executables that physically store the tables, indexes, and other database objects for your system.

Chapter 3

Supported Platforms and Hardware Requirements

This chapter includes:

- [Software and Hardware Considerations](#)
- [Operating Systems and Application Servers](#)
- [Hardware Requirements](#)
- [Application Server Memory Requirements](#)
- [Supported Platforms for the Java-based Mobile Client](#)
- [Support for Software Patches and Upgrades](#)

Software and Hardware Considerations

There are many factors that can influence software and hardware decisions. For example, your system may have to satisfy specific performance, availability, or scalability requirements, or to support running in a language other than English. These business requirements, together with the chosen system architecture, should be used in initial software and hardware planning.

Some of the questions that you should answer before beginning the installation include:

- On which hardware platform and operating system would Oracle Real-Time Scheduler be deployed?
- On which web server product would Oracle Real-Time Scheduler be deployed?
- On which database product would Oracle Real-Time Scheduler be deployed?
- Do you plan to deploy multiple Oracle Real-Time Scheduler instances on the same physical server?
- How do you plan to deploy Oracle Real-Time Scheduler?
 - Web/application/database on the same physical server
 - Web/application on one server and database on separate server
 - Each component on its own server

Note: If you deploy the mobility application and web application on different servers, the log file path should be shared on the network.

- How do you plan to install and update the Oracle Real-Time Scheduler mobile client on the mobile computers or devices?
 - Use a device management software like Oracle Mobile Server for installation and updates.
- How do you plan to secure Oracle Real-Time Scheduler when communicating with devices over unsecured networks like the internet?

For detailed descriptions of various deployment architecture choices that may aid in planning, please see the document *Oracle Utilities Application Framework Architecture Guidelines*, available on My Oracle Support (Article ID 807068.1).

The final hardware and software decisions must comply with the specific requirements of Oracle Real-Time Scheduler, as described in the rest of this chapter.

Operating Systems and Application Servers

The table below details the MINIMUM operating system and application server combinations on which this version of [Product] 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 52.x)	AIX 7.1 TL01+ AIX 7.2 TL00+	POWER	WebLogic 12.1.3.0+	Oracle 12.1.0.1+/ 12.2.0.1+
	Oracle Linux 6.5+, 7.x (based on Red Hat Enterprise Linux)*	x86_64	WebLogic 12.1.3.0+	Oracle 12.1.0.1+/ 12.2.0.1+
	Oracle Solaris 11	SPARC	WebLogic 12.1.3.0+	Oracle 12.1.0.1+/ 12.2.0.1+
Windows Server 2012 R2 (Not supported in production)		x86_64	WebLogic 12.1.3.0+	Oracle 12.1.0.1+/ 12.2.0.1+

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.

Oracle Spatial and Graph

- **Note:** Oracle Utilities Mobile Workforce Management and Oracle Real-Time Scheduler no longer requires the Oracle Spatial and Graph option to operate properly. While this release supports Oracle Spatial, additional installation steps have been added in the Oracle Utilities Mobile Workforce Management and Oracle Real-Time Scheduler *Database Administrator's Guide*, section “Creating the Database” to run against a database without this option, including Oracle Standard Edition. The Oracle Spatial Geocoder feature is available to the Oracle Utilities Mobile Workforce Management or the Oracle Real-Time Scheduler application on a restricted use basis for any customer running without the Oracle Spatial and Graph option.

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 12.1.3.0+ are supported for both embedded and native installations. Starting at Weblogic 12.2.*, embedded installations will not be supported. Only the native installation will be supported.
- WebLogic Server Enterprise Edition is required if using application clustering.
- 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

Oracle VM Support

This version of [Product] 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

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 will support 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).

Web Browser Requirements

The following operating system/web browser software is supported:

- Windows 7 (64-bit), 8.1, 10 with Internet Explorer 11
- Windows 7 (64-bit), 8.1, 10 with Firefox 38.X ESR

Java-Based Mobile Client: Software and Hardware Requirements

The following operating systems are supported by the Java-based mobile client.

- Windows 7 (64-bit)

The following is the recommended hardware configuration for Windows 7 (64-bit):

Configuration	Processor	Memory (RAM)
Recommended	Intel Core i5-2557M ULV processor	2048 MB

- Windows 8.1 (64-bit)

The following is the recommended hardware configuration for Windows 8.1 (64-bit):

Configuration	Processor	Memory (RAM)
Recommended	Fourth-generation Intel® Core™ i5vPro™ Processor	2048 MB

- Android 5.1.x,6.x,7.x

The following is the recommended hardware configuration for Android devices:

Configuration	Processor	Memory (RAM)
Recommended	Quad-core 1.5 GHz Cortex-A53 & Quad-core 2.1 GHz Cortex-A57	3 GB

Hybrid Mobile Client: Software and Hardware Requirements

The following operating systems are supported by the Hybrid mobile client.

- iOS

The following is the recommended hardware configuration for iOS device:

Configuration	Processor	Memory (RAM)
Recommended	Three core 1.5 GHz Apple A8X	2 GB

- Windows 10 (64-bit)

The following is the recommended hardware configuration for Windows 10 (64-bit) device:

Configuration	Processor	Memory (RAM)
Recommended	6th Generation Intel® Core™ i5 processor	8 GB

- Android 5.1.x,6.x,7.x

The following is the recommended hardware configuration for Android devices:

Configuration	Processor	Memory (RAM)
Recommended	Quad-core 1.5 GHz Cortex-A53 & Quad-core 2.1 GHz Cortex-A57	3 GB

Web/Business Application Server: Software and Hardware Requirements

Please consult the “Operating Systems and Application Servers” on page 2 to determine which web application servers can be used with the operating system that will be hosting this tier.

The recommendations that follow are based on a standard installation with both the application and business servers on the same machine and the system running with the default values. The minimum resource requirements exclude third-party software installation requirements. Refer to the third-party vendors for specific requirements. The following sizing excludes the Oracle database server installation.

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
\$SPLEBASE	10 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.
\$SPLAPP	4 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	3 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	5 GB	The application gets installed from this location. You need enough space to uncompress the files and install the application.

Location	Size	Usage
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.

Supported Platforms for the Java-based Mobile Client

The following section describes the devices, operating systems and features that are available with the Oracle Real-Time Scheduler Java-based mobile client application.

The mobile application can be used in a disconnected or connected mode. In **disconnected** mode the mobile application and data reside locally on the mobile device allowing the crew to work offline as needed. This means the physical device has to be compatible with the mobile application requirements it runs locally.

In **connected** mode the mobile application does not reside locally on the accessing mobile device. Instead the mobile application resides on the server and the user must be connected to the server at all times using their standard browser to access the mobile application.

Please refer to “About Connection Modes” in the user guide for more information.

The following entities are supported on mobile devices. Please note the distinction between attachments and captures:

- **Captures** are pictures or sound that are captured using native features on the device.
- **Attachments** are sent to the device with activities and require an application installed on the device to open them. Attachments can also be added to the assignments on the device.
- **GPS** pinpoints the exact location information of the crew using GPS services.
- **Maps** allow tracking the actual or planned route of the crew on a map.

Disconnected Mode

The following table lists the features supported in the **Disconnected** MCP mode.

Feature	Device Platform (Device Type)	
	Windows (Laptop)	Android (Tablet or Phone)
GPS	✓	✓
Capture Picture and Sound	✓	✓

Feature	Device Platform (Device Type)	
	Windows (Laptop)	Android (Tablet or Phone)
Download Attachments from MDT	✓	✓
Upload Attachment from MDT to Server	✓	Partial Support*
Maps	✓	✓

Note: *For more information on the features and attachment types supported on Windows and Android, please refer to the *Server Application User Guide*.

Connected Mode

The following table lists the features supported in the **Connected** MCP mode.

Feature	Device Platform (Device Type)		
	Windows (Laptop)	Android (Tablet or Phone)	iOS (Tablet or Phone)
GPS	X	X	X
Capture Picture and Sound	X	X	X
Download Attachments from MDT	X	X	X
Upload Attachment from MDT to Server	X	X	X
Maps	✓	✓	✓

The following browsers are supported by the device platforms in **Connected** MCP mode.

Device Platform	Browser Platforms
Android	<ul style="list-style-type: none"> • Chrome Browser v62.0.x on Android 5.1.x,6.x,7
iOS	<ul style="list-style-type: none"> • iOS 10, 10.2.3, 10.3 • Safari on iPad
Windows	<ul style="list-style-type: none"> • Chrome version 62.0.x on Windows 7 • Firefox version 52.x ESR on Windows 7 • Internet Explorer 11 on Windows 7

Supported on the Hybrid Mobile Client

The following section describes the devices, operating systems and features that are available with the Oracle Real-Time Scheduler hybrid mobile client application.

Hybrid Mobile Client

The following table lists the features supported by the Hybrid Mobile Client.

Feature	Device Platform (Device Type)			
	Android (Tablet or Phone)	iOS	Chrome Browser	Windows (Laptop)
GPS	✓	✓	✓	✓
Capture Picture	✓	✓	X	✓
Capture Sound	X	X	X	X
Attach File	X	X	X	X
View File (3rd party software must exist for viewing file)	✓	✓	X	✓
Barcode Scanning	✓	✓	X	✓
Signature	✓	✓	X	✓
Download Attachments from MDT	✓	✓	X	✓
Upload Images from Gallery	✓	✓	X	✓
Upload Files from MDT to Server	X	X	X	X
Maps	✓	✓	✓	✓

The following browser is supported by the device platforms in **Hybrid** mobile client.

Device Platform	Browser Platforms
Windows	• Chrome version 62.0.x on Windows 7

Note: Chrome can be used for development and debug use only. It is not supported for Production use.

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 is Hibernate software 4.1.0 which should not be upgraded.

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

Chapter 4

Planning the Installation

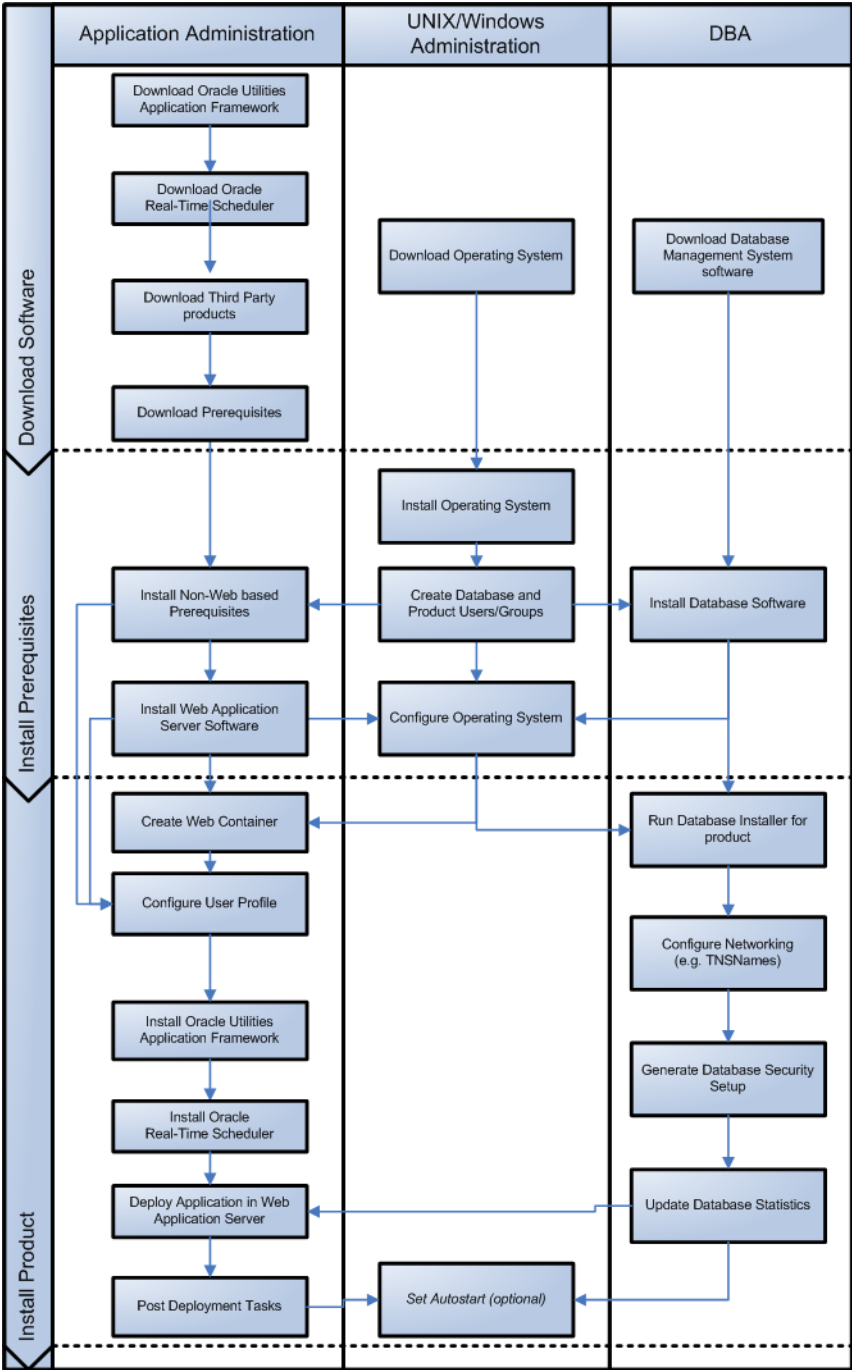
This chapter provides information for planning an Oracle Real-Time Scheduler installation, including:

- [Installation and Configuration Overview](#)
- [Before You Install](#)
- [Before You Upgrade](#)
- [Installing Prerequisite Third-Party Software](#)
- [Installation Readiness Checklist](#)

Installation and Configuration Overview

The following diagram provides an overview of the steps that need to be taken to install and configure Oracle Real-Time Scheduler

:



Before You Install

Refer to My Oracle Support for up-to-date additional information about installing Oracle Real-Time Scheduler.

Before You Upgrade

MCP Version Control Enhancement

The MCP version control enhancement requires that a certain upgrade process be followed to ensure that no data is lost and no incompatible version issues arise.

The upgrade process includes the following steps:

1. All mobile devices should end their shifts and log off.
2. Upgrade the server and all MDTs.
3. Regenerate all deployments.

For more information about this enhancement and upgrade considerations, refer to Chapter “Deploying the Application to Mobile Devices,” in the *Oracle Real-Time Scheduler Server Application User Guide*.

Processing Stale RSI messages

RSI messages are messages that are sent from the MCP device to the server. After a system upgrade, due to serialization issues, older RSI messages may not be recoverable. Therefore, RSI messages must be processed before an upgrade.

To process stale RSI messages, follow the procedure below:

1. To check for RSI messages which are in a non-finalized state (stale RSI messages), run the SQL query:

```
select count(*) from m1_srvr_status where status_lookup_flg =
'M1QU'
```

2. If this query returns any records (count >0), run the RSI Batch Process job (Batch Name: M1-RSIBP).
3. This batch job processes queued RSI messages.
 - If the record executed successfully, the status of the record is changed to Delivered (M1DE).
 - If any application error occurred, the status of the record is changed to Error (M1ER).

4. After completion of batch process, run the following SQL query:

```
select count(*) from m1_srvr_status where status_lookup_flg =
'M1QU'
```

If running this query returns any records (count>0), those records may not be recoverable.

5. Continue with the system upgrade.

In addition, refer to My Oracle Support for up-to-date additional information on Oracle Real-Time Scheduler.

Installing Prerequisite Third-Party Software

For information about the third-party software that needs to be installed for each of the supported operating system and application server combinations, please refer to the *Oracle Real-Time Scheduler Server Application Installation Guide*.

Installation Readiness Checklist

The following checklist will guide you through the installation process of the application tier. The detailed instructions for each step are presented as chapters in the *Oracle Real-Time Scheduler Server Application Installation Guide*.

Note: Please make sure that you follow the order listed below.

1. Create Group/User ID.
2. Install prerequisite software.
 - Oracle Client 12.1.0.2 (for connecting to Oracle database)
 - Java 1.8
 - Hibernate 4.1.0 FINAL and hibernate-search-5.2.3Final-dist
 - Geocoding and Map related data - Currently, Oracle Real-Time Scheduler only supports Navteq as the provider of maps and location data. For instructions on installing geocoding and map related data, please contact your specific Navteq vendor. The disk space required for installation is around 60 GB.
3. Install application server.
 - Oracle WebLogic 12c (12.1.3.0+)
4. Verify that all software is installed.
5. Set up environment variables.
6. Install Oracle Utilities Application Framework.
7. Install Oracle Real-Time Scheduler.
8. Install MapViewer 11.1.1.7.3.
9. Deploy the Oracle Real-Time Scheduler application.
10. Perform post-installation tasks.

Chapter 5

Overview of Initial Installation

This chapter provides an overview for installing Oracle Real-Time Scheduler from scratch.

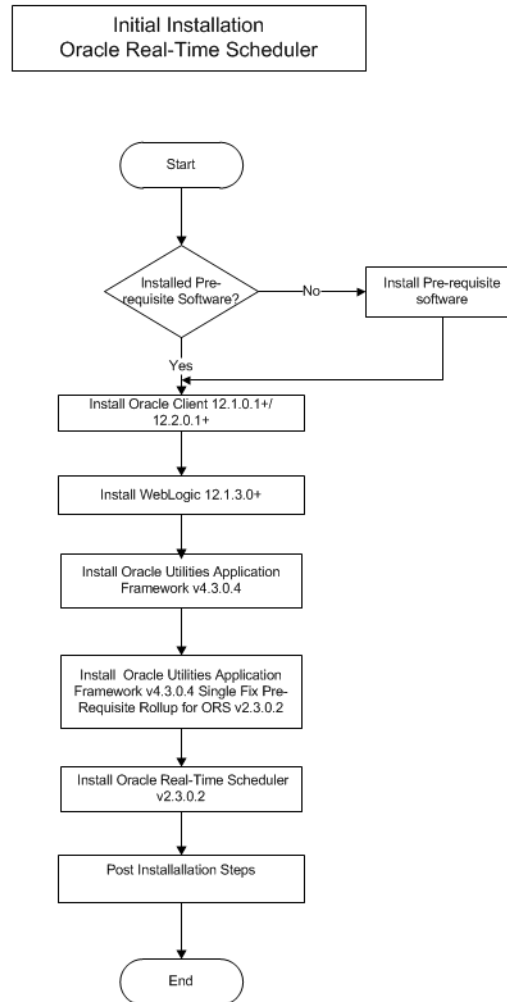
For detailed instructions, pre-install and post-install steps, please refer to the Oracle Real-Time Scheduler *Server Application Installation Guide*.

This chapter includes information on the following:

- [Initial Installation Procedure](#)

Initial Installation Procedure

The following diagram shows a typical workflow of the initial installation process.



The initial installation procedure consists of:

- [Database Component Installation](#)
- [Application Components Installation](#)

Database Component Installation

Installation of the database component of Oracle Real-Time Scheduler must be complete before you can proceed with the following sections. Refer to the section “**Initial Install**” of the *Oracle Real-Time Scheduler Database Administrator’s Guide*, which provides instructions on installing the database component.

Application Components Installation

A successful installation consists of the following steps:

- Oracle Utilities Application Framework v4.3.0 Service Pack 4
- Oracle Utilities Application Framework v4.3.0.4 Single Fix PreRequisite Rollup for ORS v2.3.0.2
- Oracle Real-Time Scheduler Component v2.3.0.2

Chapter 6

Overview of Upgrade Installation

This chapter provides an overview for upgrading from Oracle Real-Time Scheduler to v2.3.0.2.

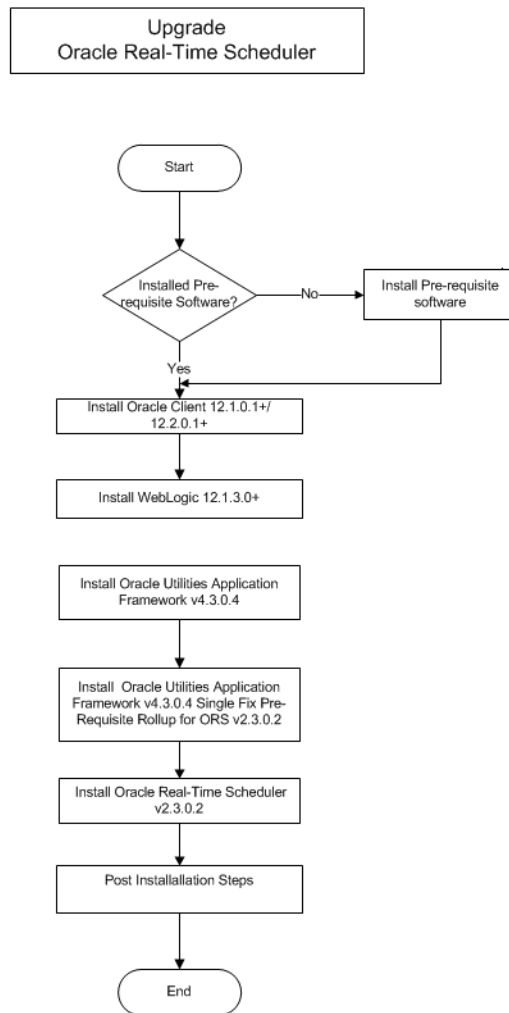
For detailed instructions, pre-upgrade and post-upgrade steps, please refer to the *Oracle Real-Time Scheduler Server Application Installation Guide*.

This chapter includes information on the following:

- [Upgrade Installation Procedure](#)

Upgrade Installation Procedure

The following diagram shows a typical workflow of the upgrade process:



The upgrade procedure consists of:

- [Database Component Upgrade](#)
- [Application Components Upgrade](#)
- [Mobile Client Upgrade](#)

Database Component Upgrade

Upgrading of the database component of Oracle Real-Time Scheduler must be complete before you can proceed with the following sections. Refer to the section “**Upgrade Install**” of the *Oracle Real-Time Scheduler Database Administrator’s Guide*, which provides instructions on installing the database component.

Application Components Upgrade

A successful upgrade consists of upgrade of the following components:

- Oracle Utilities Application Framework v4.3.0 Service Pack 4.
- Oracle Utilities Application Framework v4.3.0.4 Single Fix PreRequisite Rollup for ORS v2.3.0.2
- Oracle Real-Time Scheduler Component v2.3.0.2

Mobile Client Upgrade

Oracle Utilities supports a direct upgrade of the Java-based mobile client of Oracle Real-Time Scheduler from v2.3.0 to v2.3.0.2. Please refer to the *Oracle Real-Time Scheduler Server Application Installation Guide* for details of upgrade applicable to your mobile operating system.

Chapter 7

Overview of Demo Installation

This chapter provides instructions for installing Oracle Real-Time Scheduler for demo purposes.

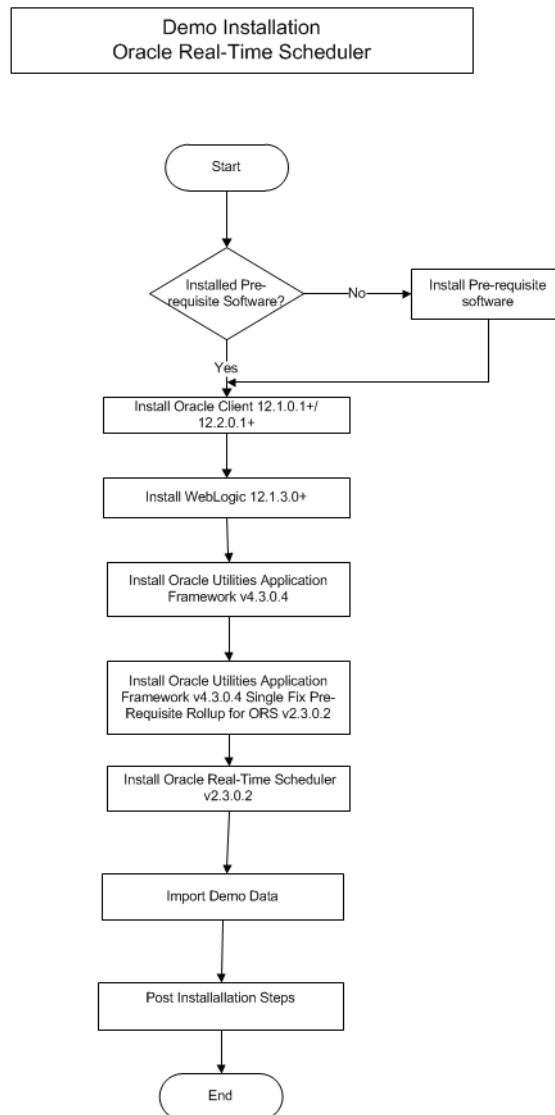
For detailed instructions, pre-install and post-install steps, please refer to the Oracle Real-Time Scheduler *Server Application Installation Guide*.

This chapter includes information on the following:

- [Demo Installation Procedure](#)

Demo Installation Procedure

The following diagram shows a typical workflow of the demo installation process.



The demo installation procedure consists of:

- [Database Component Installation](#)
- [Application Components Installation](#)

Database Component Installation

Installation of the database component of Oracle Real-Time Scheduler must be complete before you can proceed with the following sections. Refer to the section “**Demo Install**” of the *Oracle Real-Time Scheduler Database Administrator’s Guide*, which provides instructions on installing the database component.

Application Components Installation

A successful installation consists of the following steps:

- Oracle Utilities Application Framework v4.3.0 Service Pack 4.
- Oracle Utilities Application Framework v4.3.0.4 Single Fix PreRequisite Rollup for ORS v2.3.0.2
- Oracle Real-Time Scheduler Component v2.3.0.2