Oracle Real-Time Scheduler

Quick Install Guide

Release 2.2.0 Service Pack 3

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Oracle Real-Time Scheduler Quick Install Guide Release 2.2.0 Service Pack 3

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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

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 Mobile Application Installation and Deployment Guide (HTML5-based)*
- *Oracle Real-Time Scheduler DBA Guide*
- *Oracle Real-Time Scheduler Configuration Guide*

User Guides

- *Oracle Real-Time Scheduler Server Application User's Guide*
- *Oracle Real-Time Scheduler Mobile Application User's Guide (Java-based)*
- *Oracle Real-Time Scheduler Mobile Application User's Guide (HTML5-based)*

Implementation and Development

- *Oracle Real-Time Scheduler Mobile Application Implementation and Development Guide (HTML5-based)*

Map Editor Installation and User Guides

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

Framework Guides

- *Oracle Utilities Application Framework v4.2.0.2 Business Process Guide*
- *Oracle Utilities Application Framework v4.2.0.2 Administration Guide*
- *Oracle Utilities Application Framework v4.2.0.2 Release Notes*

Supplemental Documents

- *Oracle Real-Time Scheduler Server Administration Guide*
- *Oracle Real-Time Scheduler Batch 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.
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.

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.
- **Demo Installation** - a base installation with pre-populated demo data, typically used for demonstration or training purposes.
- **Upgrade Installation**- an upgrade installation from version 2.1.0.6 to version 2.2.0.3 or from version 2.2.0.1.5 to version 2.2.0.3 or from version 2.2.0.1.6 to version 2.2.0.3 or from version 2.2.0.2 to version 2.2.0.3.

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 v2.2.0.3 Release Notes
- Oracle Real-Time Scheduler v2.2.0.3 Quick Install Guide
- Oracle Real-Time Scheduler v2.2.0.3 Install Documentation
- Oracle Real-Time Scheduler v2.2.0.3 User Documentation
- Oracle Real-Time Scheduler v2.2.0.3 Supplemental Documentation

Installation Packages

- Oracle Utilities Application Framework Service Pack2 v4.2.0.2
- Oracle Utilities Application Framework v4.2.0.2 Single Fix Prerequisite Rollup for Oracle Real-Time Scheduler v2.2.0.3
- Oracle Real-Time Scheduler v2.2.0.3 Multiplatform
- Oracle Real-Time Scheduler v2.2.0.3 Mobile Application Multiplatform (HTML5-based)
- Mobile Communication Client v2.2.0.3 for Windows
- Mobile Communication Client v2.2.0.3 for Windows Mobile
- Mobile Communication Client v2.2.0.3 for Android
- Oracle Real-Time Scheduler v2.2.0.3 Oracle Database
- Oracle Real-Time Scheduler v2.2.0.3 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

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

Supported Operating Systems and Application Servers

In addition, the following table details the operating system and application server combinations on which this version of Oracle Real-Time Scheduler is supported.

Operating System and Web Browser (Client)	Operating System (Server)	Chipset	Application Server	Database
Windows 7* (Internet Explorer 8.x, 9.x, 10 and 11 in Compatibility Mode)	AIX 7.1 TL00 (64-bit)	POWER 64-bit	WebLogic 10.3.5+	Oracle 11.2.0.1+ Oracle 12.1.0.1+
	Oracle Linux 5.8, 6.2, 6.4 or 6.5 (64-bit) Red Hat Enterprise Linux 5.8, 6.2, 6.4 or 6.5 (64-bit)	x86_64	WebLogic 10.3.5+	Oracle 11.2.0.1+ Oracle 12.1.0.1+
	Sun Solaris 10 Sun Solaris 11 (64-bit)	SPARC	WebLogic 10.3.5+	Oracle 11.2.0.1+ Oracle 12.1.0.1+
	Windows Server 2008 R2 (64-bit) Windows Server 2012 R2 (64-bit)	x86_64	WebLogic 10.3.5+	Oracle 11.2.0.1+ Oracle 12.1.0.1+

** **Oracle Real-Time Scheduler** is supported on the versions of Oracle Linux specified. Because Oracle Linux is 100% userspace-compatible with Red Hat Enterprise Linux, **Oracle Real-Time Scheduler** also is supported on Red Hat Enterprise Linux for this release.

Note: Oracle Real-Time Scheduler 2.2.0.x 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 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 Real-Time Scheduler application on a restricted use basis for any customer running without the Oracle Spatial and Graph option.

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 (32-bit or 64-bit) with Internet Explorer 8.x, 9.x, 10 and 11

  Note: Internet Explorer 8.x, 9.x, 10, 11 must have Compatibility Mode enabled.

- Java plug-in 1.6.0 17

Java-Based Mobile Client: Software and Hardware Requirements

The following operating systems are supported by the 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

- Windows Embedded Handheld 6.5 Professional
  Please contact customer support for more information if you are using this hardware.

- Android 4.1, 4.2, 4.3, 4.4
  The following is the minimum recommended hardware configuration for Android devices:

Configuration	Processor	Memory (RAM)
Minimum Recommended	Quad-core 1.6 GHz Cortex-A15 & quad-core 1.2 GHz Cortex-A7	2048 MB

Note: This release has been tested on the following:

- Motorola MC75A device running Windows Embedded Handheld 6.5 Professional
- Panasonic Tough Book running Windows 7 (32-bit)
- Samsung Galaxy S4 running on Android 4.3/4.4
- Panasonic Tablet FZ-G1 running Windows 8.1 (64-bit)

Web/Business Application Server: Software and Hardware Requirements

Please consult the "Additional Notes on Supported Platforms" on page 5 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.

Disk Space Requirements

The approximate disk space requirements in a standard installation are as follows:

Location	Size	Usage
$SPLEBASE	10 GB minimum	This location is 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 the 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.
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.

Additional Notes on Supported Platforms

Oracle Database Servers

This version is supported with Oracle Database Server 11.2.0.1+ or 12.1.0.1+ on all of the certified and supported operating systems listed above.

The Oracle 11.2.0.1+ or 12.1.0.1+ client is required for this version of the database server.

The following Oracle Database Server Editions are supported:

- Oracle Database Server Standard Edition
- Oracle Database Server Enterprise Edition

Oracle VM Support

This version of Oracle Real-Time Scheduler is supported on Oracle VM Server for x86 for supported releases of Oracle Linux and Microsoft Windows operating systems.

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

Application Dependencies for Oracle Business Intelligence for Utilities

When using Oracle Real-Time Scheduler v2.2.0.3 with Oracle Business Intelligence for Utilities, you must upgrade to Oracle Utilities Advanced Spatial and Operational Analytics v2.4.0 Service Pack 4. This release is not compatible with previous releases of Oracle Utilities Advanced Spatial and Operational Analytics. For more information, see the release notes and installation documentation for Oracle Utilities Advanced Spatial and Operational Analytics, v2.4.0 Service Pack 4 available on the Oracle Technology Network.

Please note that in release v2.5.0.0, the product name for "Oracle Utilities Advanced Spatial and Operational Analytics" is changed to "Oracle Utilities Analytics".

Supported on 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 neither data nor the mobile application reside locally on the accessing mobile device. Instead the data and mobile application reside 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)	**Windows Embedded** (Hand-held or Phone)	**Android** (Tablet or Phone)
GPS	✓	✓	✓
Capture Picture and Sound	✓	✓	✓
Download Attachments from MDT	✓	✓	✓
Upload Attachment from MDT to Server	✓	Partial Support*	Partial Support*
Maps	✓	✓	✓

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

Connected Mode

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

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

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

Device Platform	Browser Platforms
Android	• Chrome Browser on Android 4.0+ • Chrome Browser v32+ on Android 4.2/4.3/4.4 • Default browser on Android 4.2/4.3/4.4
iOS	• iOS 7.0 • iOS 8.0 • Safari on iPad
Windows	• Chrome version 32+ on Windows 7 • Firefox version ESR17+ on Windows 7 • Internet Explorer 8.x/9.x on Windows 7
Windows Embedded	• Internet Explorer Mobile 6 on Windows Embedded Handheld 6.5

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 from 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.

Chapter 4

Planning the Installation

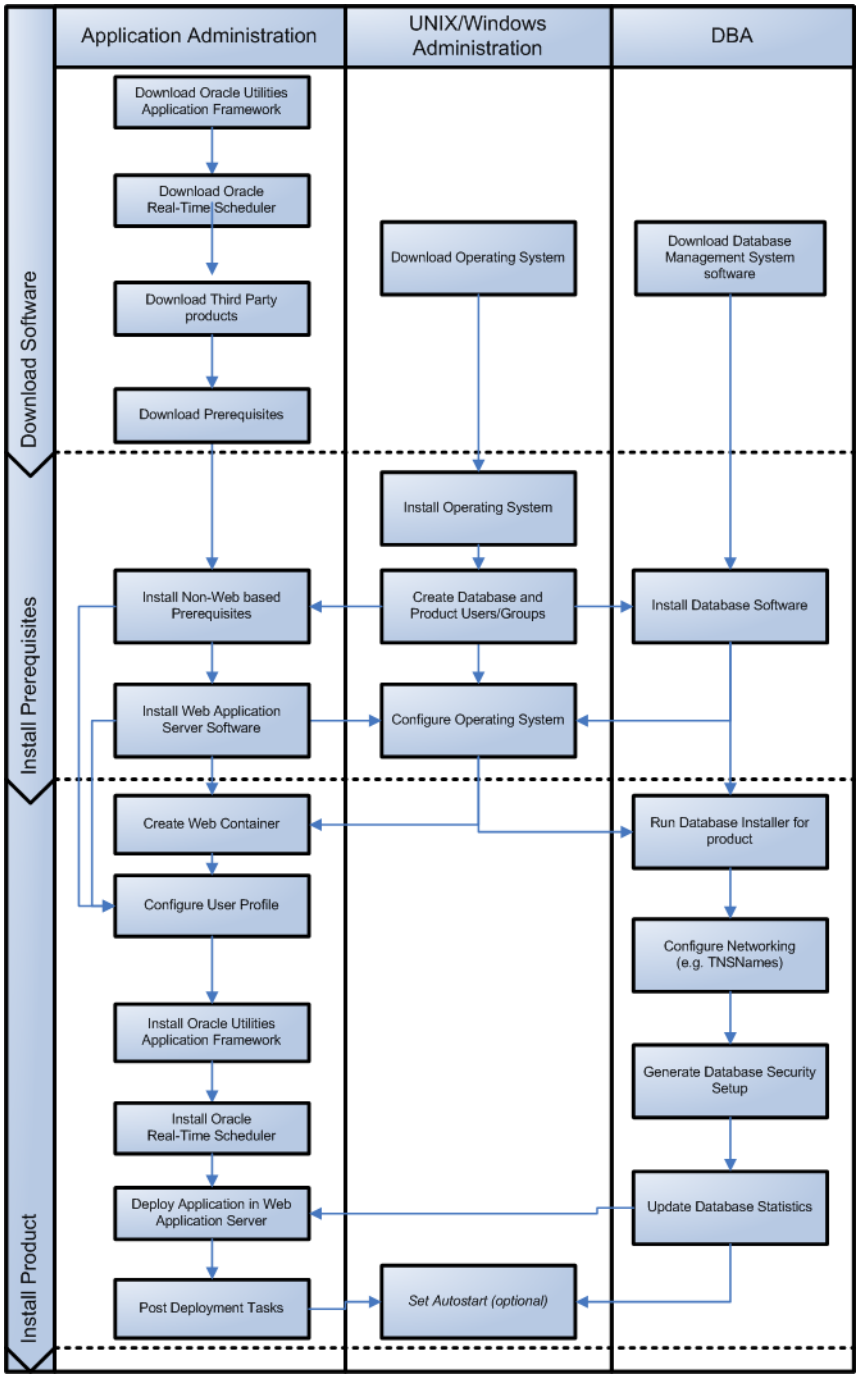
This chapter provides information for planning an Oracle Real-Time Scheduler installation, including:

- 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 Configuration 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 11.2.0.1+/12.1.0.1+ (for connecting to Oracle database)
   - Java 1.6.0.65
   - Hibernate 4.1.0FINAL
   - 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.
   - Oracle BPEL Process Manager 11g (optional)
3. Install application server.
   - Oracle WebLogic 11gR1 (10.3.6)
4. Install Oracle Application Development Framework (ADF) 11g (11.1.1.7.0) or Oracle JDeveloper 11g (11.1.1.7.0+). Ensure the version of Oracle ADF is compatible with the version of Weblogic installed.

   Note: You can choose to install either Oracle Application Developer Framework (ADF) or Oracle JDeveloper. However, Oracle recommends that you install ADF instead of Oracle JDeveloper.
5. Verify that all software is installed.
6. Set up environment variables.
7. Install Oracle Utilities Application Framework.
8. Install Oracle Real-Time Scheduler.
9. Install MapViewer 11.1.1.7.3.
10. Deploy the Oracle Real-Time Scheduler application.
11. Perform Post installation tasks.

Chapter 5

Overview of Initial Installation

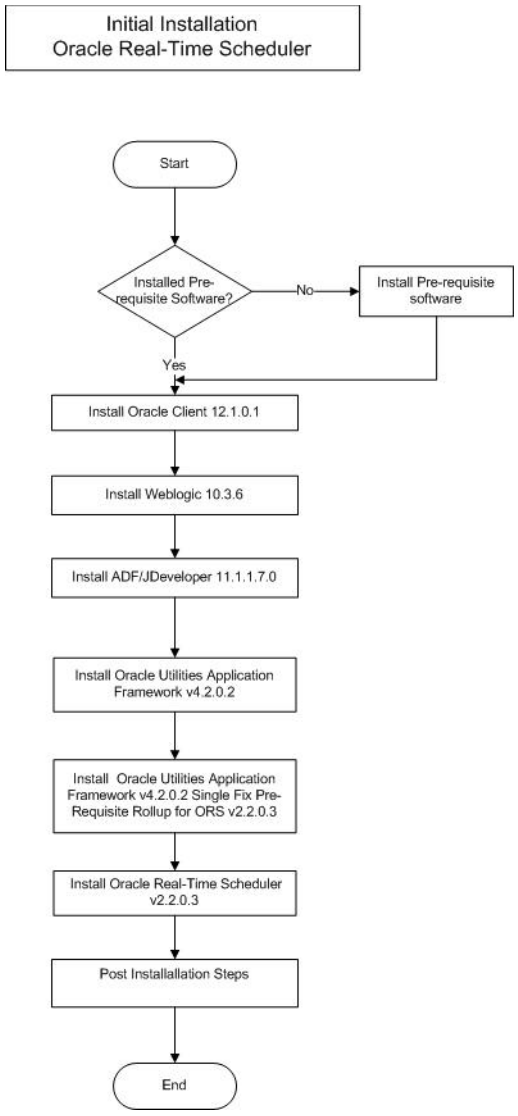
This chapter provides an overview for installing Oracle Real-Time Scheduler from scratch.

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

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 v4.2.0.0 Service Pack 2
- Oracle Utilities Application Framework v4.2.0.2 Single Fix PreRequisite Rollup for ORS v2.2.0.3
- Oracle Real-Time Scheduler Component v2.2.0.3

Chapter 6

Overview of Upgrade Installation

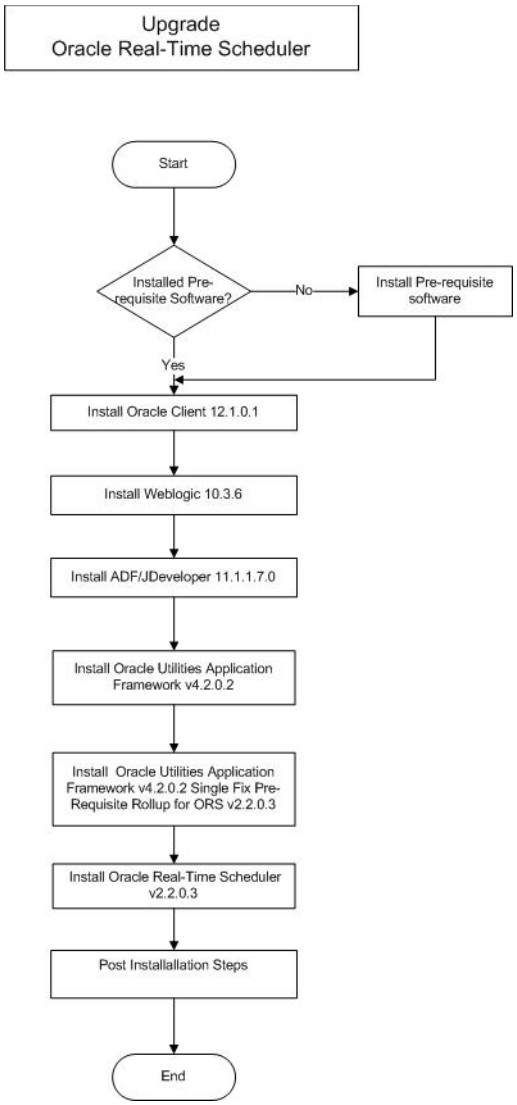
This chapter provides an overview for upgrading from Oracle Real-Time Scheduler v2.1.0.6 or from v2.2.0.1.5 or from v2.2.0.1.6 or from v2.2.0.2 to v2.2.0.3.

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

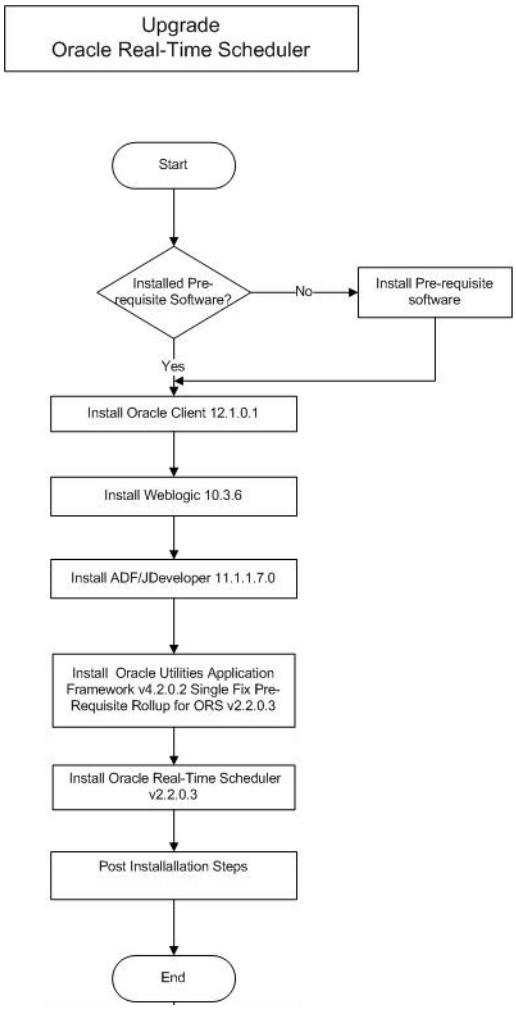
This chapter includes information on the following:

Upgrade Installation Procedure

The following diagram shows a typical workflow of the upgrade process from v2.1.0.6:



The following diagram shows a typical workflow of the upgrade process from v2.2.0.1.5 or from v2.2.0.1.6 or v2.2.0.2:



The upgrade procedure consists of:

- Database Component Upgrade
- Application Components Upgrade
- Java-Based 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 from v2.1.0.6 consists of upgrade of the following components:

- Oracle Utilities Application Framework v4.2.0.0 Service Pack 2
- Oracle Utilities Application Framework v4.2.0.2 Single Fix PreRequisite Rollup for ORS v2.2.0.3

- Oracle Real-Time Scheduler Component v2.2.0.3

A successful upgrade from v2.2.0.1.5 or from v2.2.0.1.6 or v2.2.0.2 consists of upgrade of the following components:

- Oracle Utilities Application Framework v4.2.0.2 Single Fix PreRequisite Rollup for ORS v2.2.0.3
- Oracle Real-Time Scheduler Component v2.2.0.3

Java-Based Mobile Client Upgrade

Oracle Utilities supports a direct upgrade of the Java-based mobile client of Oracle Real-Time Scheduler from v2.1.0.6 or v2.2.0.1.5 or from v2.2.0.1.6 or v2.2.0.2 to v2.2.0.3. 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

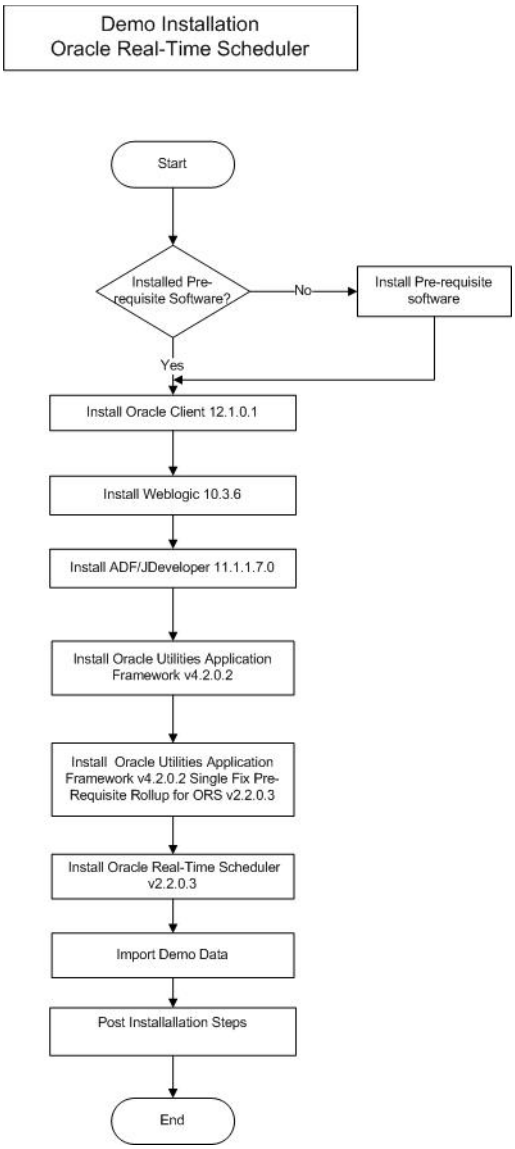
This chapter provides instructions for installing Oracle Real-Time Scheduler for demo purposes.

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

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 v4.2.0.0 Service Pack 2
- Oracle Utilities Application Framework v4.2.0.2 Single Fix PreRequisite Rollup for ORS v2.2.0.3
- Oracle Real-Time Scheduler Component v2.2.0.3

Chapter 8

Oracle Real-Time Scheduler Licensing Restrictions

This chapter outlines licensing restrictions related to Oracle Real-Time Scheduler.

License Restrictions Matrix

Oracle Real-Time Scheduler provides functionality used by multiple Oracle Utilities products. Some of the functionality provided with Oracle Real-Time Scheduler is restricted, and can only be used if specific products have been licensed. The table below indicates the specific functional areas included with Oracle Real-Time Scheduler.

- "✓" indicates that the functional area is included with the product.
- "X" indicates that the functional area is not included with the product.

  In order to use functionality listed as "not included", customers must license the product that includes the desired functionality. For example, a customer licensing Oracle Real-Time Scheduler who wants to use business intelligence must also license Oracle Utilities Analytics.

Functionality	Oracle Real-Time Scheduler Base	Oracle Real-Time Scheduler Mobile Client	Oracle Utilities Analytics
CDI/Scheduling Gantt	✓	X	X
Contractor Management	✓	X	X
Mobile Client	X	✓	X
Resource Management	✓	X	X
Service Management	✓	X	X
Transfer of Goods	✓	X	X
Business Intelligence	X	X	✓

Oracle Real-Time Scheduler Functionality

The table below describes the functional areas provided with Oracle Real-Time Scheduler.

Functional Area	Description
CDI/Scheduling Gantt	Provides a single point of interaction for monitoring and managing tasks, crew shifts, and KPIs.
Contractor Management	Manages the assignment, scheduling and completion tracking of work being completed by contractors.
Mobile Client	Packages and delivers mobile application components to the mobile device terminals (MDTs) used by mobile workers and field resources.
Resource Management	Manages company resources such as mobile workers, vehicles, crews and crew shifts, dispatchers and dispatcher shifts, shift templates, location based services, and resource route replay.
Service Management	Manages company services such as activities, tasks, alerts, time windows, and remote messages.
Transfer of Goods	Manages the process of transporting goods between locations including tracking goods and managing restrictions and vehicle load limits.
Business Intelligence	Extracts and loads data for use in business intelligence applications using base package batch processes.