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Preface

About This Document

This document will help you to understand the prerequisites, supported platforms, and hardware and software requirements for installing the Oracle Revenue Management and Billing (ORMB) reporting framework.

Intended Audience

This document is intended for the following audience:

- End-Users
- System Administrators
- Consulting Team
- Implementation Team

Organization of the Document

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## Related Documents

You can refer to the following documents for more information:

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<th>Document</th>
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<tr>
<td>Oracle Revenue Management and Billing Version 2.6.0.1.0 Release Notes</td>
<td>Provides a brief description about the new features, enhancements, UI and database level changes, supported platforms, framework upgrade, supported upgrades, and technology upgrade made in this release. It also highlights the discontinued features, bug fixes, and known issues in this release.</td>
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<tr>
<td>Oracle Revenue Management and Billing Installation Guide</td>
<td>Lists the application server pre-requisites, supported platforms, and software and hardware requirements for installing the Oracle Revenue Management and Billing application. It explains how to install the Oracle Revenue Management and Billing application.</td>
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<tr>
<td>Oracle Revenue Management and Billing Database Administrator’s Guide</td>
<td>Provides information about the Oracle Database Server and Client required for installing the Oracle Revenue Management and Billing database. It explains how to install database with and without demo data. It provides database configuration guidelines including recommended settings for the Oracle Exadata Database machine.</td>
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<tr>
<td>Oracle Revenue Management and Billing Server Administration Guide</td>
<td>Explains the Oracle Revenue Management and Billing (ORMB) architecture and technical know-how required for configuring and using the ORMB application. It explains how to configure and deploy web and business application servers. In addition, it explains how to monitor client machines, web and/or business application servers, and database connections.</td>
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1. **Overview**

This section provides information on how to install Oracle Revenue Management and Billing (ORMB) Reporting Framework.

### 1.1 Installation Overview

Installing Oracle Revenue Management and Billing Reporting Framework involves the following steps:

1. Verifying and updating configuration files which include key parameters required for generating reports as described in [Verifying Configuration Files](#) section.

2. Review the different tiers of the application architecture as described in the [Application Architecture Overview](#) section.

3. Understand the hardware requirements for installing the application and the supported platforms for the application and database servers as described in the [Supported Platforms and Hardware Requirements](#) section.

**Note:** For more information, refer *Oracle Revenue Management and Billing Database Administrator’s Guide*. 

2. Verifying the Configuration Files

You need to verify whether the configuration files required for generating reports have valid details. There are two approaches which you can take to verify and update the configuration files:

1. Comment the following line in the
   `/scratch/rmbbuild/spl/ORMB26000/templates/spl.properties.template` file:
   ```
   ouaf.runtime.billView.directoryPath=@force_forward_slash(SPLEBASE)@/splapp/billView/
   ```
   To comment the line type `##` at the beginning of that line. For example, `###ouaf.runtime.billView.directoryPath=@force_forward_slash(SPLEBASE)@/splapp/billView/`

   Alternatively, you can verify and update the following two configuration files:
   - `spl.properties`
   - `environ.ini`

   The `spl.properties` file lists the parameters and directory path name used by report generating algorithm.

   By default, the statements in the respective files not referred by the algorithm while generating the reports are marked commented (##). However, it is recommended to verify the same. In case they are not commented, you must comment the same.

   To check which statements need to be commented, you need to search for statements which end with `/billView/` in the respective `spl.properties` file. The table below represents the respective `spl.properties` file path and their valid values.

<table>
<thead>
<tr>
<th>File Path</th>
<th>Valid Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>/scratch/rmbbuild/spl/TECHQA26010/etc/conf/root/WEB-INF/classes/spl.properties</code></td>
<td><code>###ouaf.runtime.billView.directoryPath=/scratch/rmbbuild/spl/TECHQA26010/splapp/billView/</code></td>
</tr>
<tr>
<td><code>/scratch/rmbbuild/spl/TECHQA26010/etc/conf/XAIApp/WEB-INF/classes/spl.properties</code></td>
<td><code>###ouaf.runtime.billView.directoryPath=/scratch/rmbbuild/spl/TECHQA26010/splapp/billView/</code></td>
</tr>
<tr>
<td><code>/scratch/rmbbuild/spl/TECHQA26010/splapp/mpl/config/spl.properties</code></td>
<td><code>###ouaf.runtime.billView.directoryPath=/scratch/rmbbuild/spl/TECHQA26010/splapp/billView/</code></td>
</tr>
<tr>
<td><code>/scratch/rmbbuild/spl/TECHQA26010/splapp/applications/root/WEB-INF/classes/spl.properties</code></td>
<td><code>###ouaf.runtime.billView.directoryPath=/scratch/rmbbuild/spl/TECHQA26010/splapp/billView/</code></td>
</tr>
<tr>
<td><code>/scratch/rmbbuild/spl/TECHQA26010/splapp/applications/XAIApp/WEB-INF/classes/spl.properties</code></td>
<td><code>###ouaf.runtime.billView.directoryPath=/scratch/rmbbuild/spl/TECHQA26010/splapp/billView/</code></td>
</tr>
</tbody>
</table>
To check and update the `spl.properties` files, follow the below steps:

1. Login to WinSCP.
2. Browse to the respective file path. For example, 
   `/scratch/rmbbuild/spl/TECHQA26010/etc/conf/root/WEB-INF/classes/spl.properties`
3. Open the `spl.properties` file.
4. Search for the line which ends with `/billView/`
5. If the line is not commented, type `##` at the beginning of that line. For example, 
   `##ouaf.runtime.billView.directoryPath=/scratch/rmbbuild/spl/TECHQA26010/splapp/billView/`
6. Save and close the file.

To check and update the `environ.ini` file, follow the below steps:

1. Login to WinSCP.
2. Browse to the file path. For example, 
   `/scratch/rmbbuild/spl/TECHQA26010/etc/ENVIRON.INI`
3. Verify if `TOP_VERSION` value = V2.6.0.1.0. If the value is not valid, update the same.
4. Verify if `TOP_VERSION_NUM` value = 2.6.0.1.0, If the value is not valid, update the same.

If `ouaf.application.URL` value refers to localhost, you need to execute the 'update_spl_template.sh' script. This script is a utility which updates the URL. It should be present in installation folder on a server. For example, `/scratch/rmbbuild/spl/TECHQA26010`.

The script would look like:

```bash
#!/bin/bash

ENV_NAME="TECHQA26010"
ENV_PATH="/scratch/rmbbuild/spl/$ENV_NAME"
CCB_SPL_PROPERTY_FILE="CCB_spl.properties.exit.include"
HOSTNAME=`hostname -f`;
sed -i "s/@WEB_WLHOST@/$HOSTNAME/g" $ENV_PATH/templates/SCCB_SPLPROPERTY_FILE
```

To update the URL path, follow the below steps:

1. After installation, execute the script.
2. Run `<INSTALL_DIR>/bin/initialSetup.sh` script.
3. Restart the server.
3. Application Architecture Overview

The application is split into multiple tiers:

3.1 Tier 1: Browser-Based Client

Oracle Revenue Management and Billing supports the following operating systems:

- Windows 7, 8.1, 10 (64-bit)

The following operating system and web browser combinations are supported:

- Windows 7, 8.1, 10 (64-bit) with Internet Explorer 11.x (not in the Compatibility mode)

3.2 Tier 2: Web Application Server

Oracle Revenue Management and Billing supports the following Web application servers:

- Oracle WebLogic

3.3 Tier 3: Database Server

Oracle Revenue Management and Billing supports Oracle Database Server.

Please see Oracle Revenue Management and Billing Server Administration Guide for a more detailed description of the application architecture and individual tiers.
4. **Supported Platforms**

This section shows each of the operating system/server combinations on which the product is supported. It includes:

- Operating Systems and Application Servers
- Oracle Database Servers
- SDK – Supported Combinations
- Oracle WebLogic Server Information
- Oracle VM Support
- Oracle Support Policy Regarding VMware

4.1 **Operating Systems and Application Servers**

The installation is supported on many operating system, application server, and database server combinations. For the software requirements for each of these combinations, see *Oracle Revenue Management and Billing Installation Guide*. 
The following table lists the operating system and application server combinations on which Oracle Revenue Management and Billing Version 2.6.0.1.0 is supported:

<table>
<thead>
<tr>
<th>Operating System and Web Browser (Client)</th>
<th>Operating System (Server)</th>
<th>Chipset</th>
<th>Application Server</th>
<th>Database Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 7, 8.1, 10 (64-bit) with Internet Explorer 11.x</td>
<td>AIX 7.2 TL0 (64-bit)</td>
<td>POWER 64-bit</td>
<td>WebLogic 12.2.1.x (64-bit)</td>
<td>Oracle 12.2.0.1</td>
</tr>
<tr>
<td>Oracle Linux 6.5+ and 7.x (64-bit)</td>
<td>x86_64</td>
<td>WebLogic 12.2.1.x (64-bit)</td>
<td>Oracle 12.2.0.1</td>
<td></td>
</tr>
<tr>
<td>Red Hat Enterprise Linux¹ 6.5+ and 7.x (64-bit)</td>
<td>x86_64</td>
<td>WebLogic 12.2.1.x (64-bit)</td>
<td>Oracle 12.2.0.1</td>
<td></td>
</tr>
<tr>
<td>Windows Server 2012 R2 (64-bit)</td>
<td>x86_64</td>
<td>WebLogic 12.2.1.x (64-bit)</td>
<td>Oracle 12.2.0.1</td>
<td></td>
</tr>
</tbody>
</table>

Note:

Oracle Corporation distributes Oracle Linux with the following two kernels:

**Red Hat Compatible Kernel** – This kernel is identical to the kernel shipped in Red Hat Enterprise Linux.

**Unbreakable Enterprise Kernel** – This kernel is based on a later Linux 2.6-series kernel, with Oracle's own enhancements for OLTP, InfiniBand, SSD disk access, NUMA-optimizations, Reliable Datagram Sockets (RDS), async I/O, OCFS2, and networking.

Oracle claims that the Unbreakable Enterprise Kernel is compatible with Red Hat Enterprise Linux; and Oracle middleware and third-party Red Hat Enterprise Linux-certified applications can be installed and run unchanged on Unbreakable Enterprise Kernel. However, for users requiring strict compatibility with Red Hat or for users running kernel modules dependent on specific kernel versions, the Red Hat Compatible Kernel offers 100% compatibility with Red Hat Enterprise Linux.

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¹ Oracle Revenue Management and Billing is tested and certified on Oracle Linux 6.5+ and 7.x. Oracle Linux is 100% userspace-compatible with Red Hat Enterprise Linux, and therefore Oracle Revenue Management and Billing is supported on Red Hat Enterprise Linux.
4.2 Oracle Database Servers

Oracle Revenue Management and Billing Version 2.6.0.1.0 is supported with Oracle Database Server 12.2.0.1 on all operating systems listed above. The following Oracle Database Server Editions are supported:

- Oracle Database Enterprise Edition

Oracle Database Client 12.1.0.2 is required for Oracle Database Server 12.2.0.1.

4.3 SDK - Supported Combinations

Refer to the SDK documentation for supported platforms and installation instructions.

4.4 Oracle WebLogic Server Information

The following Oracle WebLogic Server Editions are supported:

- Oracle WebLogic Server Standard Edition 12.2.1.x
- Oracle WebLogic Server Enterprise Edition 12.2.1.x (required if using application clustering)

4.5 Oracle VM Support

Oracle Revenue Management and Billing Version 2.6.0.1.0 is supported on Oracle VM Server for x86 (64-bit) supported releases of Oracle Linux and Microsoft Windows operating systems.

4.6 Oracle Support Policy Regarding VMware

5. Installing ORMB Reporting

Prerequisites
To install ORMB Reporting Version 2.6.0.1.0, you should have:

- ORMB application installed.

Procedure
To install ORMB Reporting Version 2.6.0.1.0:

1. Go to WebLogic console.
2. Select DEPLOYMENTS from home page.
3. Deployment Screen appears. Click on Lock & Edit.
4. **Install Deployment** option is enabled.

![Figure 3: Install Deployment](image)

5. Click **Install**. The ‘Locate deployment to install and prepare for deployment’ screen appears.

6. Select the path ‘/scratch/rmbbuild/spl/<INSTALL DIRECTORY>/splapp/applications’.

![Figure 4: Locate Deployment Screen](image)

7. Select spl-reporting.ear node.

![Figure 5: Deployment Option](image)

8. Click NEXT. The options to ‘Choose targeting style’ appear.

9. Select ‘Install this deployment as an application’ and click NEXT.
10. You will see ‘Optional Settings’ page. Set default values to all fields and click NEXT.

11. ‘Review your choices and click Finish’ options appear. Select ‘No, I will review the configuration later.’ Click Finish.

12. The ‘spl-reporting’ ear file will be deployed into ‘distribute Initializing’ state.
13. Click ‘Activate Changes’ to activate the changes.

![Figure 9: Activate Changes](image)

14. Spl-reporting state changes to ‘Prepared’.

![Figure 10: Deployment State](image)

15. To activate deployed reporting ear file, select spl-reporting node and click Start. Select ‘Servicing all requests’ from the drop-down list.

![Figure 11: Activate Deployment](image)
16. ‘Start Application Assistant’ screen appears.

![Start Application Assistant](image1)

Figure 12: Start Application Assistant

![Deployment State](image2)

Figure 13: Deployment State

17. Select Yes. The status of deployed reporting ear file is ‘ACTIVE’.

**Note:** For more information, refer to Oracle Revenue Management and Billing Installation Guide.

### 5.1 Oracle WebLogic

You must download Oracle WebLogic from Oracle Software Delivery Cloud. The supported versions of Oracle WebLogic Server are listed in the Operating Systems and Application Servers section.

### 6. Contacting Oracle Support