Oracle® Communications Session Report Manager

Upgrade Guide for Oracle Fusion Middleware 19c

Release 9.0
F95198-01
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Oracle Communications Session Report Manager Upgrade Guide for Oracle Fusion Middleware 19c, Release 9.0

F95198-01

Contents

About This Guide

This document and other product-related documents are described in the Related Documentation table.

Related Documentation

Table 1 Oracle Communications Product Plug-in Documentation Library

Document Name	Description
Session Element Manager User Guide	Provides information for managing and optimizing network infrastructure elements and their functions with comprehensive tools and applications used to provision fault, configuration, accounting, performance, and security (FCAPS) support for managed network functions and their associated devices in Oracle Communications Session Delivery Manager (SDM).
Report Manager User Guide	Provides information about configuring Report Manager to interoperate with Oracle BI Publisher as well as creating reports on Session Delivery product network devices.
Report Manager Installation Guide	Provides information for installing Oracle Communications Report Manager product as an addition to SDM including the Oracle database and BI Publisher components. The Oracle session delivery product plugin must be added to Oracle Communications Session Delivery Manager before performing the Report Manager installation.
Route Manager User Guide	Provides information for updating local route table (LRT) data on a single device or multiple devices.

Table 2 Oracle Communications Session Delivery Manager Documentation Library

Document Name	Document Description
Administration Guide	Provides the following administration information: • Implement SDM on your network as a standalone server or high availability (HA) server. • Login to the SDM application, access GUI menus including help, customize the SDM application, and change your password. • Access the product plugin service through the GUI to manage product plugin tasks, including how product plugins are uploaded and installed. • Manage security, faults, and transport layer security certificates for east-west peer SDM server communication, and southbound communication with network function (NF) devices. • Configure northbound interface (destination) fault trap receivers and configure the heartbeat trap for northbound systems. • Monitor SDM server health to detect heartbeat messages and display the server status to prevent health problems, or view server disk utilization information and server directory statistics. • Maintain SDM server operations, which includes database backup and database restoration and performing server cluster operations. • Use available SDM server scripts, the contents of fault trap notifications, and a list of northbound notification traps generated by the SDM server.
Installation Guide	Provides the following installation information: • Do pre-installation tasks, which include reviewing system requirements, adjusting linux and firewall settings, completing SDM server settings and configuring your NNCentral account for security reasons. • Do the typical installation to perform the minimal configuration required to run the SDM server. • Do the custom installation to perform more advanced configurations including the mail server, cluster management, Route Manager, transport layer security (TLS), and Oracle database configuration.
Release Notes	Contains information about the administration and software configuration of the SDM feature support new to this release.

Table 2 (Cont.) Oracle Communications Session Delivery Manager Documentation Library

Document Name	Document Description
Security Guide	Provides the following security guidelines: • Use guidelines to perform a secure installation of SDM on your server, which includes methods for securing the server, firewall settings, system support for encryption and random number generators (RNG), using HTTPS, and password guidelines. • Review Security Manager features that are used to configure groups, users, operations, privileges, and manage access to the system. • Follow a checklist to securely deploy SDM on your network and maintain security updates.
REST API Guide	Provides information for the supported REST APIs and how to use the REST API interface. The REST API interface allows a northbound client application, such as a network service orchestrator (NSO), to interact with SDM and its supported product plugins.
SOAP API Guide	The SOAP API guide provides information for the SOAP and XML provisioning Application Programming Interface (API) client and server programing model that enables users to write client applications that automate the provisioning of devices. The web service consists of operations that can be performed on devices managed by the SDM server and data structures that are used as input and output parameters for these operations.

My Oracle Support

My Oracle Support (https://support.oracle.com) is your initial point of contact for all product support and training needs. A representative at Customer Access Support (CAS) can assist you with My Oracle Support registration.

Call the CAS main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. When calling, make the selections in the sequence shown below on the Support telephone menu:

1. Select 2 for New Service Request.
2. Select 3 for Hardware, Networking, and Solaris Operating System Support.
3. Select one of the following options:
   - For technical issues such as creating a new Service Request (SR), select 1.
   - For non-technical issues such as registration or assistance with My Oracle Support, select 2.

You are connected to a live agent who can assist you with My Oracle Support registration and opening a support ticket.

My Oracle Support is available 24 hours a day, 7 days a week, 365 days a year.

Emergency Response

In the event of a critical service situation, emergency response is offered by the Customer Access Support (CAS) main number at 1-800-223-1711 (toll-free in the US), or call the Oracle Support hotline for your local country from the list at http://www.oracle.com/us/support/contact/index.html. The emergency response provides immediate coverage, automatic escalation, and other features to ensure that the critical situation is resolved as rapidly as possible.

A critical situation is defined as a problem with the installed equipment that severely affects service, traffic, or maintenance capabilities, and requires immediate corrective action. Critical situations affect service and/or system operation resulting in one or several of these situations:

- A total system failure that results in loss of all transaction processing capability
- Significant reduction in system capacity or traffic handling capability
- Loss of the system's ability to perform automatic system reconfiguration
- Inability to restart a processor or the system
- Corruption of system databases that requires service affecting corrective actions
- Loss of access for maintenance or recovery operations
- Loss of the system ability to provide any required critical or major trouble notification

Any other problem severely affecting service, capacity/traffic, billing, and maintenance capabilities may be defined as critical by prior discussion and agreement with Oracle.

Locate Product Documentation on the Oracle Help Center Site

Oracle Communications customer documentation is available on the web at the Oracle Help Center (OHC) site, http://docs.oracle.com. You do not have to register to access these documents. Viewing these files requires Adobe Acrobat Reader, which can be downloaded at http://www.adobe.com.

1. Access the Oracle Help Center site at http://docs.oracle.com.
2. Click **Industries**.
3. Under the Oracle Communications sub-header, click the **Oracle Communications documentation** link.
   The Communications Documentation page appears. Most products covered by these documentation sets appear under the headings "Network Session Delivery and Control Infrastructure" or "Platforms."
4. Click on your Product and then Release Number.
   A list of the entire documentation set for the selected product and release appears.
5. To download a file to your location, right-click the **PDF** link, select **Save target as** (or similar command based on your browser), and save to a local folder.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Revision History

This section provides a revision history for this document.

Date	Revision
April 2024	Session Delivery Manager 9.0.3 Release

1 Pre-upgrade Tasks

Perform the following tasks before upgrading.

Before upgrading FMW 12.2.1.2 to 12.2.1.4, ensure that you:

1. Create a new directory oracle1 1-1
2. Shutting down the servers 1-2

Create a New Directory for the Oracle User

A new directory oracle1 is created to store the FMW files in this directory, that are used to install BI Publisher.

Create the oracle1 directory under /home/oracle to place the files needed for Fusion MiddleWare installation.

- As the Oracle user, run this command to create the directory oracle1 under /home/oracle:

```
[oracle@vm ~]# mkdir oracle1
```

Shutdown the FMW Servers and Oracle BI instance

To stop the Fusion Middleware servers and Oracle BI instance and servers.

1. As the Oracle user, go to the path:

```
[oracle@vm]$cd /home/oracle/Oracle/Middleware/Oracle_Home/user_projects/
domains/bi/bitools/bin
```

2. Run the command to shutdown the FMW Servers and Oracle BI instance:

```
[oracle@bin]$ ./stop.sh
```

2

Install Oracle BI Publisher

Follow the instructions given in this section to install:

- BI Publisher
- Weblogic Server
- Oracle Fusion Middleware Infrastructure
- Oracle Business Intelligence 12c

Install Fusion Middleware Infrastructure

With the introduction of Business Intelligence (BI) Publisher Release 12c, the Repository Creation Utility is part of the Oracle Fusion Middleware.

Follow the instructions given in this section to install the Oracle Fusion Middleware infrastructure in preparation for installing the BI Publisher.

1. Download Oracle Fusion Middleware 12c from the Oracle Business Intelligence Downloads page. Look for the .Zip file fmw_12.2.1.3.0_infrastructure_Disk1_1of1.zip.
2. Copy the file to your server in the oracle1 directory created under the path /home/oracle/oracle1.
3. Login to your server as the oracle user with the -Y flag
4. Go to the oracle1 directory at the path /home/oracle/oracle1.

   ```
   ssh -Y oracle@vm
   cd oracle1
   ```

5. Ensure that the file was not corrupted during transfer. Match the checksum of the file to checksum published by Oracle for the file. The checksum is displayed next to the download link. Use this command to calculate the checksum.

   ```
   - md5sum <filename>
   ```

   The checksum output has the following format: <checksum> <byte count> <filename>
6. Extract the contents of the file fmw_12.2.1.3.0_infrastructure_Disk1_1of1.zip.

   ```
   unzip fmw_12.2.1.3.0_infrastructure_Disk1_1of1.zip
   ```

7. Run this command on the resulting JAR file to run the Oracle Fusion Middleware installer:

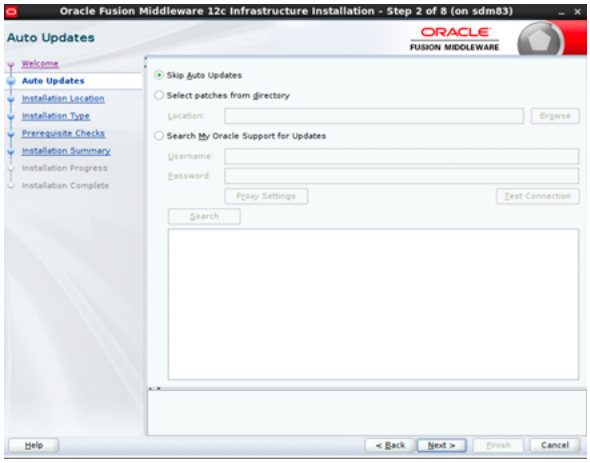
   ```
   java -d64 -jar fmw_12.2.1.3.0_infrastructure.jar
   ```

8. In the **Welcome** window, click **Next**.
9. In the **Auto Updates** window,

a. Select the default choice (Skip Auto Updates) if you do not plan on receiving any updates for Oracle Fusion Middleware from Oracle Support and click **Next**.

b. However, if you want automatic updates later, or the ability to search for updates through Oracle Support, you can choose the other options and click **Next**. For example:

Figure 2-1 Auto Updates



10. Create a new directory Oracle_Home1 at the path /home/oracle/Oracle/Middleware

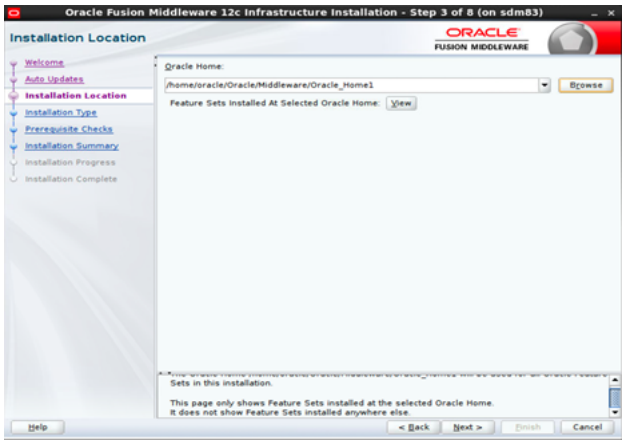
```
[oracle@vm ~]$ cd /home/oracle/Oracle/Middleware
[oracle@vm Middleware]$ mkdir Oracle_Home1
```

11. In the Installation Location window, enter the path of the New Oracle Home:

```
/home/oracle/Oracle/Middleware/Oracle_Home1
```

12. click **Next**.

Figure 2-2 Installation Location



13. In the **Installation Type** window, keep the default choice (Fusion Middleware Infrastructure) and click **Next**.
14. In the **Prerequisite Checks** window, checks are performed and click **Next**.
15. In the **Installation Summary** window, click **Install** to begin the Oracle Fusion Middleware installation.

    The Installation Progress window appears to display the progress of the installation.
16. When the installation completes, click **Next**.
17. In the **Installation Complete** window, click **Finish**.

Setting the NEW_ORACLE_HOME Path

Set the variable NEW_ORACLE_HOME to refer to it quickly at multiple places.

1. Open the file: /home/oracle/.bashrc file
2. Append the following line to permanently set the NEW_ORACLE_HOME variable in the /home/oracle/.bashrc file:

   ```
   export NEW_ORACLE_HOME=/home/oracle/Oracle/Middleware/Oracle_Home1
   ```
3. Start a new bash shell as the "oracle" Linux user. For example:

   ```
   ssh -Y oracle@<my_oracle_server>
   ```

3
Installing Oracle Business Intelligence 12c

Installing the Oracle Business Intelligence 12c software is an important part of the Oracle BI Publisher installation.

1. Download the Oracle Business Intelligence 12c Installation files from the Oracle Business Intelligence Downloads page. The installation files are:

   ```
   fmw_12.2.1.4.0_bi_linux64_Disk1_1of2.zip
   fmw_12.2.1.4.0_bi_linux64_Disk1_2of2.zip
   ```

2. Copy the Oracle Business Intelligence 12c Installation files to the path: /home/oracle/oracle1.
3. Extract the contents of the .Zip files to get:
   - bi_platform-12.2.1.4.0_linux64-2.bin
   - bi_platform-12.2.1.4.0_linux64.bin

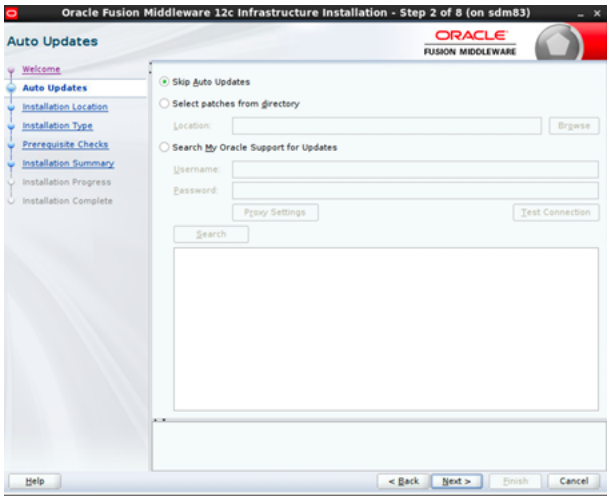
   ```
   [oracle@vm ]$ cd oracle1
   [oracle@vm oracle1]$ unzip fmw_12.2.1.4.0_bi_linux64_Disk1_1of2.zip
   [oracle@vm oracle1]$ unzip fmw_12.2.1.4.0_bi_linux64_Disk1_2of2.zip
   ```

4. Execute the Oracle Business Intelligence 12c installer as the oracle user:

   ```
   ./bi_platform-12.2.1.4.0_linux64.bin
   ```

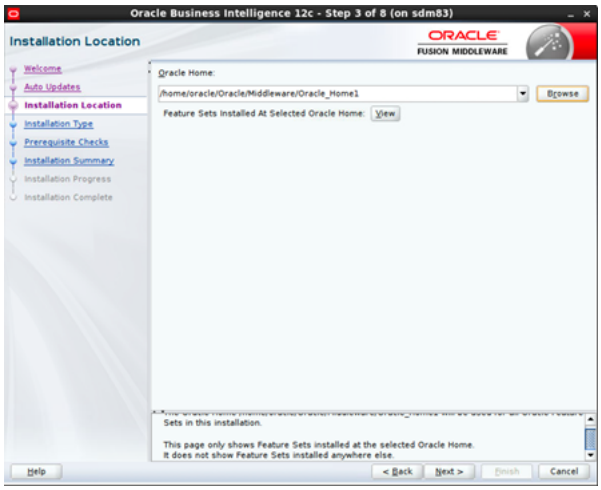
5. In the **Welcome** window click **Next**.
6. In the **Auto Updates** window:
   a. You can use the default choice (Skip Auto Updates) if you do not plan on receiving any updates for the Oracle Business Intelligence 12c software from Oracle Support, and click **Next**.
   b. However, if you want automatic updates later or the ability to search updates through Oracle Support, you can choose the other options, and click **Next**.

Figure 3-1 Installing Auto Updates



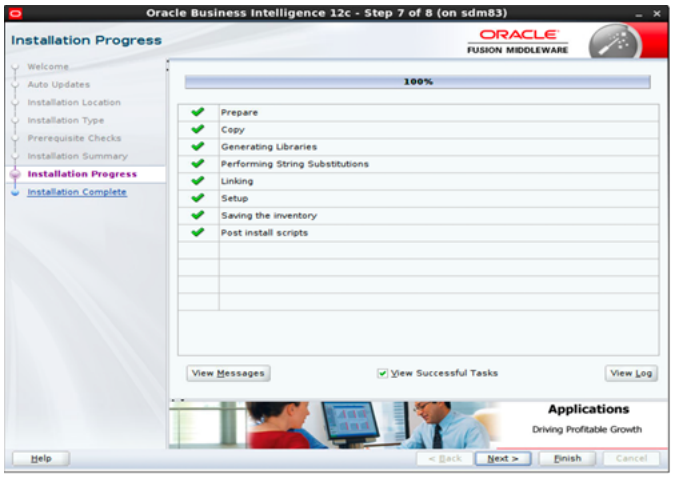
7. In the **Installation Location** window, select the directory from the Oracle Home dropdown list or browse to the directory where you want to install the software. This graphic shows the /home/oracle/Oracle/Middleware/Oracle_Home1 directory:

Figure 3-2 Configure installation location



8. In the **Installation Type** window, select the **BI Platform Distribution** option that you want. The default is BI Platform Distribution with Samples.
9. In the **Prerequisite Checks** window, click **Next**.
10. In the **Installation Summary** window, click **Install**.
11. In the **Installation Progress** window, click **Next**.

Figure 3-3 Oracle Business Intelligence 12c software Installation Progress



12. In the **Installation Complete** window, click **Finish**.

4
Running a Pre-upgrade Readiness Check

To identify potential issues with the upgrade, Oracle recommends that you run a readiness check before you start the upgrade process. Note that the readiness check may not be able to discover all potential issues with your upgrade.

1. Go to the path oracle_common/upgrade/bin directory of new oracle home:

```
[oracle@vm]$ cd $NEW_ORACLE_HOME/oracle_common/upgrade/bin
[oracle@vm bin]$ ./ua -readiness
```

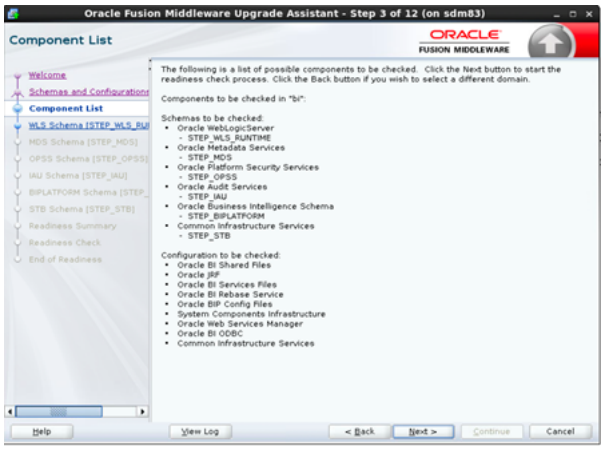
2. On the **Welcome** screen, review information about the readiness check. Click **Next**.
3. On the **Readiness Check Type** screen, select the **Domain Based** option, and then select:
   - **Include checks for all schemas**
   - **Include checks for all configurations**
4. Select the readiness check as following. Give the **Domain Directory** of old Oracle_Home as given below and click **Next**:

```
/home/oracle/Oracle/Middleware/Oracle_Home/user_projects/domains/bi
```

Figure 4-1 Schemas and Configuration

5. In the Components list dialog box,

Figure 4-2 Components List



Component- WLS Schema (STEP_WLS_RUNTIME)

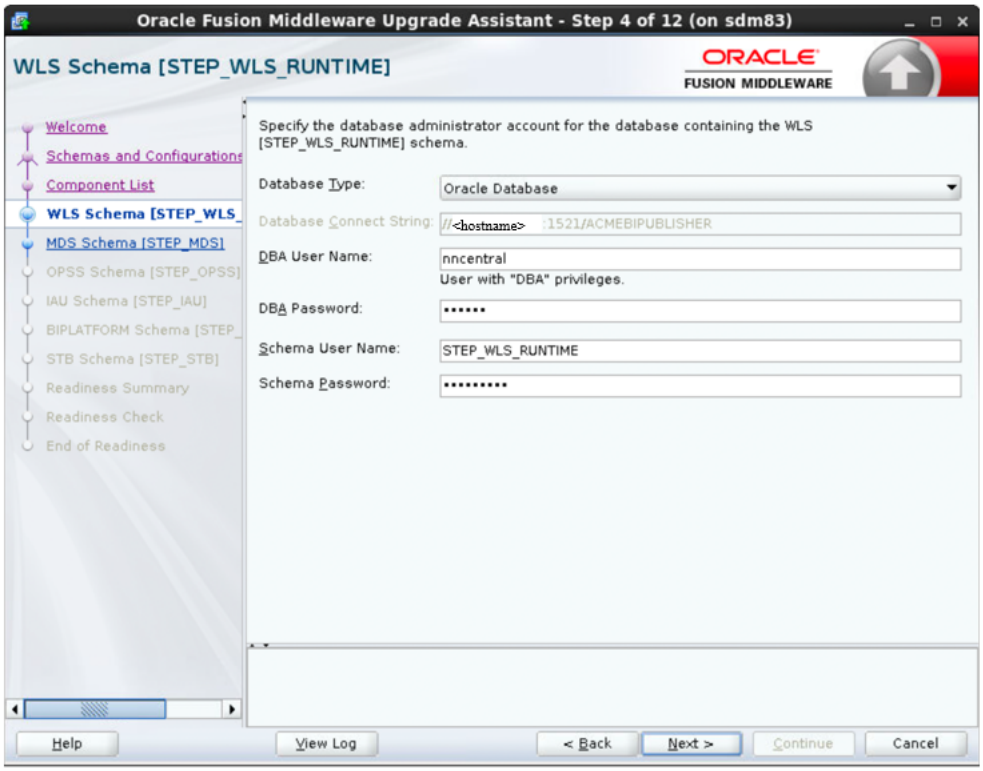
For the Component- WLS Schema (STEP_WLS_RUNTIME), keep the fields identified with the default values.

1. Change any of the fields as required below:
2. See the table to view the descriptions of the fields on the Component- WLS Schema (STEP_WLS_RUNTIME):

Table 4-1 Component- WLS Schema (STEP_WLS_RUNTIME)

Field	Description
Database Type	(Default) Oracle Database
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA user name	nncentral
DBA password	Enter the password for Oracle Database
Schema user name	(Default) STEP_WLS_RUNTIME
Schema password	(Default) Password for Schema is filled

Figure 4-3 Component- WLS Schema (STEP_WLS_RUNTIME)



Component - MDS Schema (STEP_MDS)

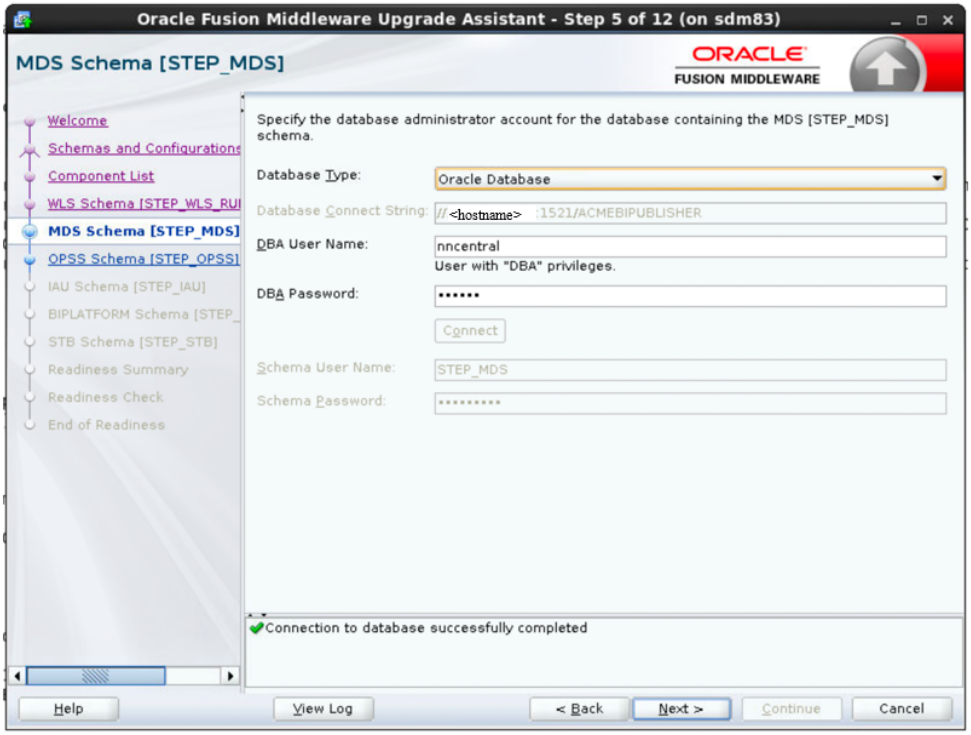
For the Component- MDS Schema (STEP_MDS), keep the fields identified with the default values.

1. Change any of the fields as required below:
2. See the table to view the descriptions of the fields on the MDS Schema (STEP_MDS):

Table 4-2 MDS Schema (STEP_MDS)

Field	Description
Database Type	(Default) Oracle Database
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA user name	nncentral
DBA password	Enter the password for Oracle Database
Schema user name	(Non-editable) STEP_MDS
Schema password	(Default) Password for Schema is filled

Figure 4-4 MDS Schema (STEP_MDS)



Component- OPSS Schema (STEP_OPSS)

For the Component- OPSS Schema (STEP_OPSS), keep the fields identified with the default values.

1. Change any of the fields as required below:
2. See the table to view the descriptions of the fields on the MDS Schema (STEP_MDS):

Table 4-3 Component- OPSS Schema (STEP_OPSS)

Field	Description
Database Type	(Default) Oracle Database
DBA user name	nncentral
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA password	Enter the password for Oracle Database
Schema user name	(Non-editable) STEP_OPSS
Schema password	(Default) Password for Schema is filled

3. Click **Next**.

Component- IAU Schema (STEP_IAU)

For the Component- IAU Schema (STEP_IAU), keep the fields identified with the default values.

1. Change any of the fields as required below:
2. See the table to view the descriptions of the fields on the Component- IAU Schema (STEP_IAU):

Table 4-4 Component- IAU Schema (STEP_IAU)

Field	Description
Database Type	(Default) Oracle Database
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA user name	nncentral
DBA password	Enter the password for Oracle Database
Schema user name	(Non-editable) STEP_IAU
Schema password	(Default) Password for Schema is filled

3. Click **Next**.

Component- BIPLATFORM Schema (STEP_BIPLATFORM)

For the Component- BIPLATFORM Schema (STEP_BIPLATFORM), keep the fields identified with the default values.

1. Change any of the fields as required below:
2. See the table to view the descriptions of the fields on the Component- BIPLATFORM Schema (STEP_BIPLATFORM):

Table 4-5 Component- BIPLATFORM Schema (STEP_BIPLATFORM)

Field	Description
Database Type	(Default) Oracle Database
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA user name	nncentral
DBA password	Enter the password for Oracle Database
Schema user name	(Non-editable) STEP_BIPLATFORM
Schema password	(Default) Password for Schema is filled

3. Click **Next**.

Component- STB Schema (STEP_STB)

For the Component- STB Schema (STEP_STB), keep the fields identified with the default values.

1. Change any of the fields as required below:
2. See the table to view the descriptions of the fields on the Component- STB Schema (STEP_STB):

Table 4-6 Component- STB Schema (STEP_STB)

Field	Description
Database Type	(Default) Oracle Database
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA user name	nncentral
DBA password	Enter the password for Oracle Database
Schema user name	(Non-editable) STEP_STB
Schema password	(Default) Password for Schema is filled

3. Click **Next**.

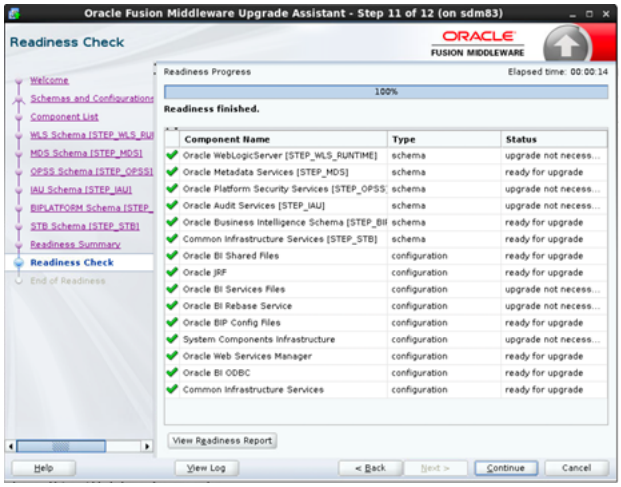
Reviewing Readiness Summary

On the **Readiness Summary** screen, review the summary of the readiness checks that will be performed based on your selections.

1. On the **Readiness Check** screen, review the status of the readiness check. The process can take several minutes.

   If you are checking multiple components, the progress of each component displays in its own progress bar in parallel.
2. When the readiness check is complete, click **Continue**.

Figure 4-5 Readiness Check Summary



3. At the end of Readiness screen, review the results of the readiness check (Readiness Success or Readiness Failure):
   a. If the readiness check is successful, click **View Readiness Report** to review the complete report. Oracle recommends that you review the Readiness

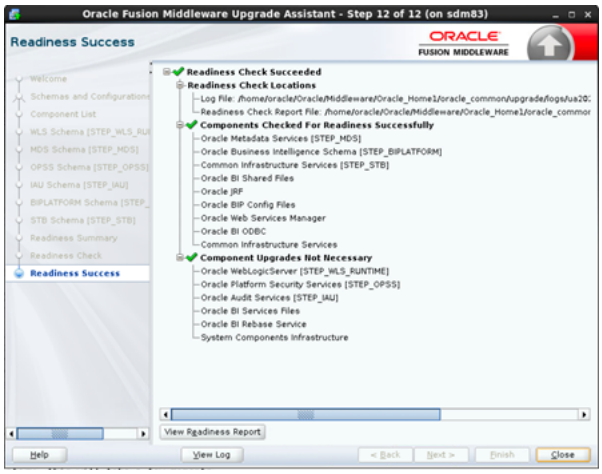
Report before you perform the actual upgrade even when the readiness check is successful.

b. Use the **Find** option to search for a particular word or phrase within the report. The report also indicates where the completed Readiness Check Report file is located.

c. Click **Close**.

4. If the readiness check encounters an issue or error, click **View Log** to review the log file, identify and correct the issues, and then restart the readiness check. The log file is managed by the command-line options you set.

Figure 4-6 Readiness Success



5
Starting the Upgrading Assistant

Upgrade product schemas using the Upgrade Assistant.

1. Go to the oracle_common/upgrade/bin directory of new oracle home:

   ```
   [oracle@vm]$ cd $NEW_ORACLE_HOME/oracle_common/upgrade/bin
   ```

2. To upgrade product schemas using the Upgrade Assistant, follow these steps:

   ```
   [oracle@vm bin]$ ./ua
   ```

3. On the **Welcome** screen, review an introduction to the Upgrade Assistant and information about important pre-upgrade tasks.
4. Click **Next**.
5. On the **All Schemas** screen, select **All Schemas Used by a Domain**.
   a. Click **All Schemas Used by a Domain** to allow the Upgrade Assistant to discover and select all components that have a schema available to upgrade in the domain specified in the Domain Directory field. This is also known as a domain assisted schema upgrade. Additionally, the Upgrade Assistant pre-populates connection information on the schema input screens
   b. Give the Domain Directory of old Oracle_Home as:

      ```
      /home/oracle/Oracle/Middleware/Oracle_Home/user_projects/domains/bi
      ```

      > **Note:**
      >
      > Oracle recommends that you select All Schemas Used by a Domain for most upgrades to ensure all of the required schemas are included in the upgrade

   c. Click **Next**.

Figure 5-1 All Schemas Used by a Domain

6. On the **Component List** screen, click Next.
7. 4. On the **Prerequisites** screen, acknowledge that the prerequisites have been met by selecting all the check boxes. Click **Next**.

Figure 5-2 Prerequisites

> **Note:**
>
> The Upgrade Assistant does not verify whether the prerequisites have been met.

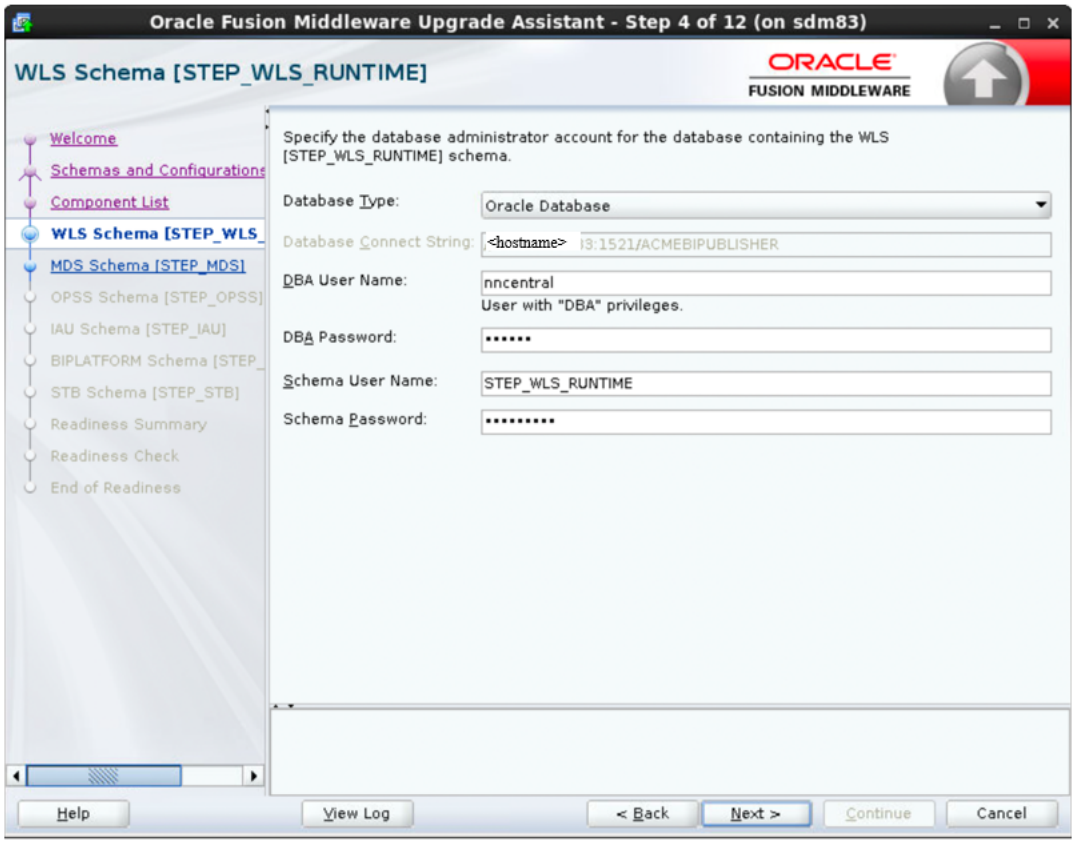
Component-WLS Schema (STEP_WLS_RUNTIME)

For the Component- WLS Schema (STEP_WLS_RUNTIME), keep the fields identified with default values and change any of the fields as required below, and click **Next**:

Table 5-1 WLS Schema (STEP_WLS_RUNTIME)

Fields	Description
Database Type	(Default) Oracle Database
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA username	nncentral
DBA password	Enter the password for Oracle Database
Schema username	(Default) STEP_WLS_RUNTIME
Schema password	(Default) Password for Schema is filled

Figure 5-3 Component- WLS Schema (STEP_WLS_RUNTIME)



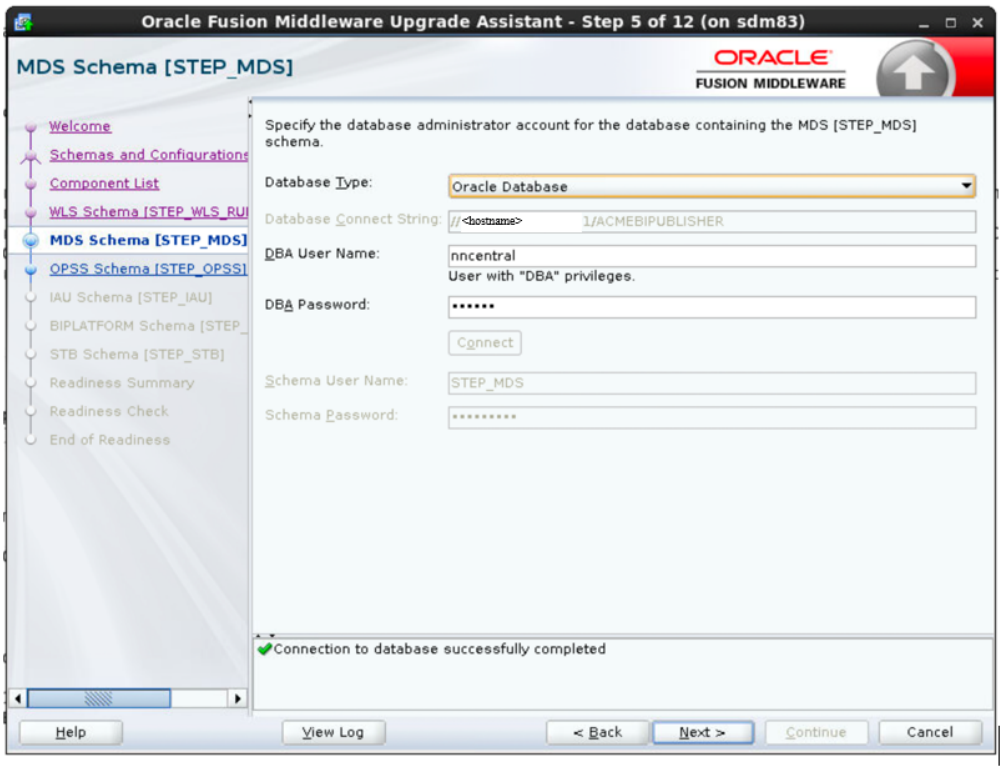
Component- MDS Schema (STEP_MDS)

For the Component- MDS Schema (STEP_MDS), keep the fields identified with default values and change any of the fields as required below, and click **Next**.

Table 5-2 Fields for Component- MDS Schema (STEP_MDS)

Field	Description
Database Type	(Default) Oracle Database
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA username	nncentral
DBA password	Enter the password for Oracle Database
Schema username	(Non-editable) STEP_MDS
Schema password	(Default) Password for Schema is filled.

Figure 5-4 MDS Schema (STEP_MDS)



Component- OPSS Schema (STEP_OPSS)

For the Component- OPSS Schema (STEP_OPSS), keep the fields identified with default values and change any of the fields as required below

Table 5-3 Component- OPSS Schema

Fields	Description
Database Type	(Default) Oracle Database

Table 5-3 (Cont.) Component- OPSS Schema

Fields	Description
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA username	nncentral
DBA password	Enter the password for Oracle Database
Schema username	(Non-editable) STEP_OPSS
Schema password	(Default) Password for Schema is filled

Click **Next**.

Component- IAU Schema (STEP_IAU)

For the Component- IAU Schema (STEP_IAU), keep the fields identified with the default values.

1. Change any of the fields as required below:
2. See the table to view the descriptions of the fields on the Component- IAU Schema (STEP_IAU):

Table 5-4 Component- IAU Schema (STEP_IAU)

Field	Description
Database Type	(Default) Oracle Database
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA user name	nncentral
DBA password	Enter the password for Oracle Database
Schema user name	(Non-editable) STEP_IAU
Schema password	(Default) Password for Schema is filled

3. Click **Next**.

Component- BIPLATFORM Schema (STEP_BIPLATFORM)

For the Component- BIPLATFORM Schema (STEP_BIPLATFORM), keep the fields identified with the default values.

1. Change any of the fields as required below:
2. See the table to view the descriptions of the fields on the Component- BIPLATFORM Schema (STEP_BIPLATFORM):

Table 5-5 Component- BIPLATFORM Schema (STEP_BIPLATFORM)

Fields	Description
Database Type	(Default) Oracle Database

Table 5-5 (Cont.) Component- BIPLATFORM Schema (STEP_BIPLATFORM)

Fields	Description
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA user name	nncentral
DBA password	Enter the password for Oracle Database
Schema user name	(Non-editable) STEP_BIPLATFORM
Schema password	(Default) Password for Schema is filled

3. Click **Next**.

Component- STB Schema (STEP_STB)

For the Component- STB Schema (STEP_STB), keep the fields identified with the default values.

1. Change any of the fields as required below:
2. See the table to view the descriptions of the fields on the Component- STB Schema (STEP_STB):

Table 5-6 Component- STB Schema (STEP_STB)

Field	Description
Database Type	(Default) Oracle Database
Database Connect String	(Non-editable) <hostname>:1521:ACMEPUBLISHER
DBA user name	nncentral
DBA password	Enter the password for Oracle Database
Schema user name	(Non-editable) STEP_STB
Schema password	(Default) Password for Schema is filled

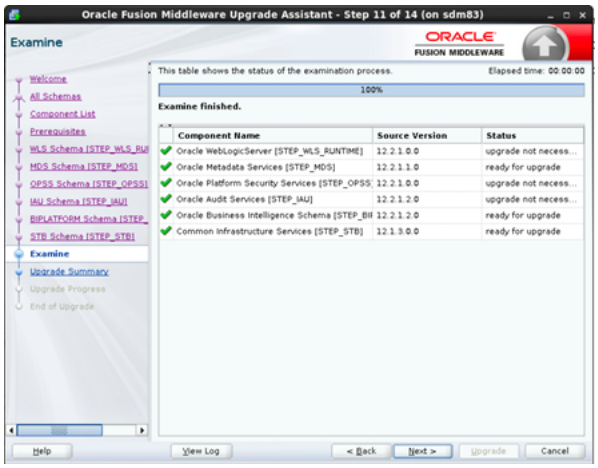
3. Click **Next**.

Reviewing the Status in the Examine Screen

On the **Examine** screen, review the status of the Upgrade Assistant as it examines each schema, verifying that the schema is ready for upgrade

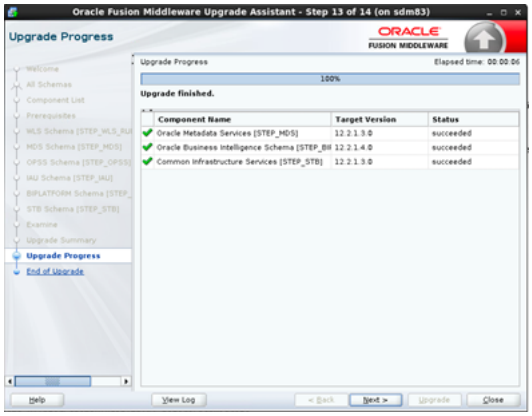
1. If the status in the Examine screen shows **Examine finished**, click **Next**.

Figure 5-5 Review the Status in the Examine Screen



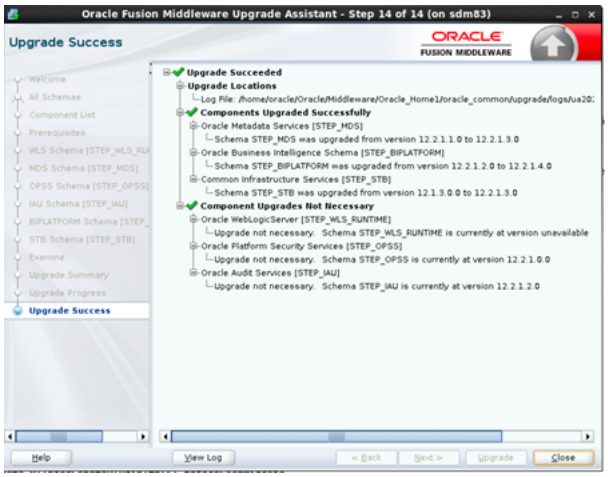
2. On the **Upgrade Summary** screen, review the summary of the schemas that are being upgraded and/or created.
3. Click **Upgrade**.
4. On the **Upgrade Progress** screen, monitor the status of the upgrade.
5. Click **Next**.

Figure 5-6 Upgrade Progress Screen



6. If the upgrade is successful, on the **Upgrade Success** screen, click **Close** to complete the upgrade and close the wizard.

Figure 5-7 Upgrade Success Screen



Backing Up the mapViewerConfig.xml File

From Oracle User, go to the path where mapViewerConfig.xml file is present, and create a new file and copy the existing mapViewerConfig.xml file to the backup file.

```
[oracle@vm]$ cd /home/oracle/Oracle/Middleware/Oracle_Home/
oracle_common/modules/oracle.mapviewer/conf/
[oracle@vm conf]$ cp mapViewerConfig.xml mapViewerConfig_bckp.xml
```

Backing up the BI Domain

From Oracle User, go to the path where bi domain is present, and create a new folder and copy the existing bi domain to the backup folder.

```
[oracle@vm]$ cd /home/oracle/Oracle/Middleware/Oracle_Home/
user_projects/domains
[oracle@vm domains]$ cp -r bi bi_bckp
```

> **Note:**
>
> Verify that the backed up versions of the domain are complete.

Reconfiguring Oracle BI Domain with the Reconfiguration Wizard

Run the Reconfiguration Wizard to reconfigure your domain component configurations to 12c (12.2.1.4.0).

1. As the Oracle user, go to the folder: `oracle_common/common/bin`:

   ```
   [oracle@vm]$ cd $NEW_ORACLE_HOME/oracle_common/common/bin
   ```

2. Start the Reconfiguration Wizard with the following logging options:

   ```
   [oracle@bin]$ ./reconfig.sh -log=log_file -log_priority=ALL
   ```

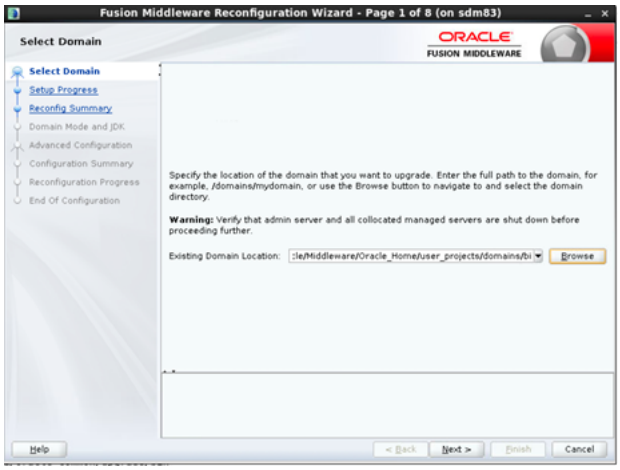
   where the log_file is the absolute path of the log file you want to create for the domain reconfiguration session. This is helpful if you need to troubleshoot the reconfiguration process.

3. On the **Select Domain** screen, specify the location of the domain you want to upgrade or click **Browse** to navigate and select the domain directory and click **Next**.

   Give the existing Domain Location as-

   ```
   /home/oracle/Oracle/Middleware/Oracle_Home/user_projects/domains/bi/
   ```

Figure 5-8 Select Domain screen



4. On the **Reconfiguration Setup Progress** screen, view the progress of the setup process. After completion, click **Next**.
5. On the **Reconfiguration Summary** screen, click **Next**.

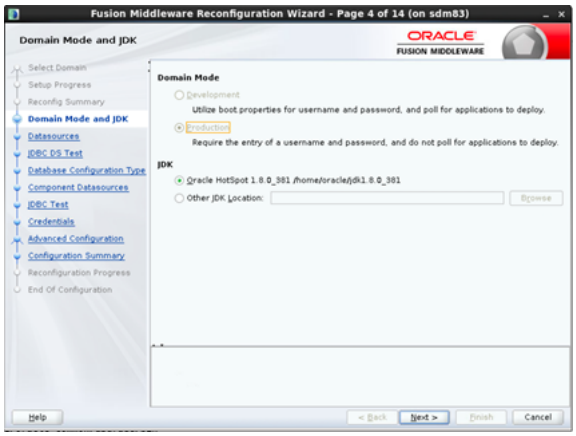
Domain Mode and JDK

Select the JDK to use in the domain

1. On the **Domain Mode and JDK** screen, select the JDK to use in the domain or click **Browse** to navigate to the JDK file you want to use.
2. Click **Next**.

> **Note:**
>
> The supported JDK version for 12c (12.2.1.4.0) is 1.8.0_131 and later.

Figure 5-9 Domain Mode and JDK



For a list of JDKs that are supported for a specific platform, see Oracle Fusion Middleware Supported System Configurations.

JDBC Data Sources

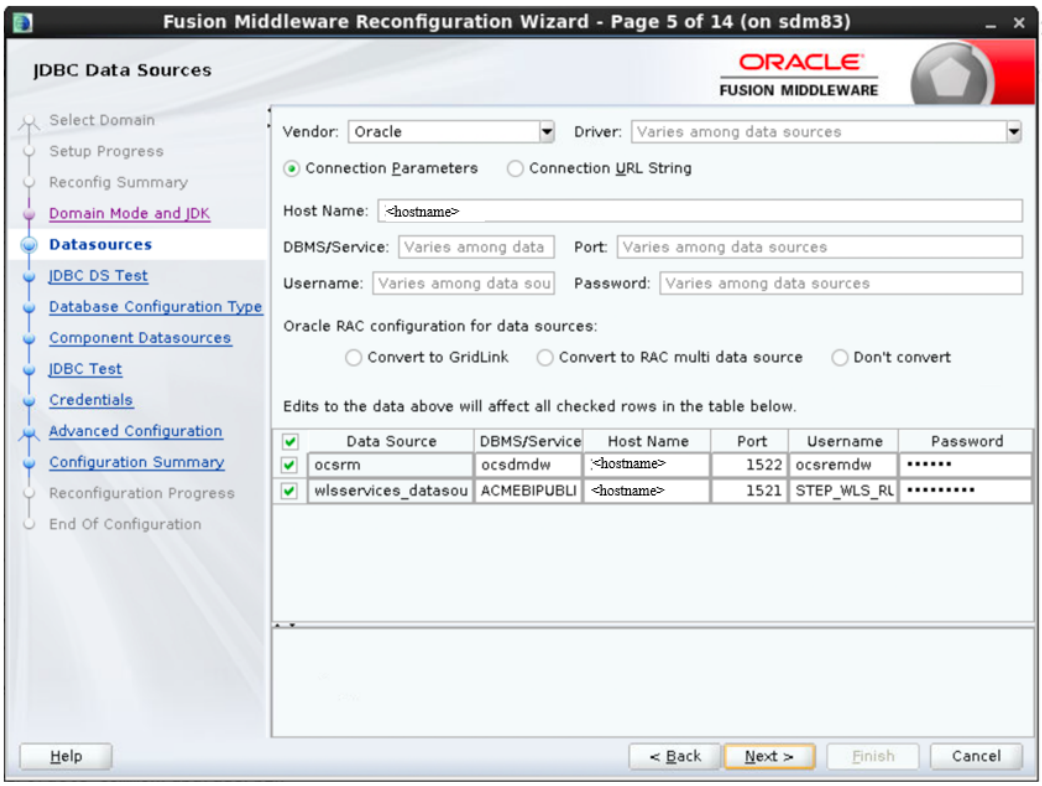
Configure the JDBC Data sources defined in your domain source.

1. On the **JDBC Data Sources** screen, configure the JDBC Data sources defined in your domain source. Select the check boxes for **ocsrm** and **wlsservices_datasource**. The following information is filled-in by default.

Table 5-7 JDBC Data Sources

Fields	Description
Vendor	(Default) Oracle
Driver	(Default) Varies among data sources
DBMS/Service	(Default) Varies among data sources
Port	(Default) Varies among data sources
Username	(Default) Varies among data sources
Password	(Default) Varies among data sources

Figure 5-10 Datasources



2. Click **Next**.

> **Note:**
>
> If you do not select any datasources on the **JDBC Data Sources** screen, the following warning displays: `Missing Driver`. Click **Ok** to proceed without verification, click **Cancel** to return to the JDBC Data Sources page. In this case, if you click **OK**, the datasources are not verified.

3. On the **JDBC Datasources Test** screen, select the check box for the data source connection you configured on the JDBC Data Sources screen and click **Test Selected Connections** to test the datasource connection, and.

> **Note:**
>
> To test the database connections, the database to which you are connecting must be running. If you do not want to test the connections at this time, do not select any datasources. Click **Next** to continue.

Database Configuration Type

Enter the database connection details.

1. On the **Database Configuration Type** screen, the fields are automatically populated.

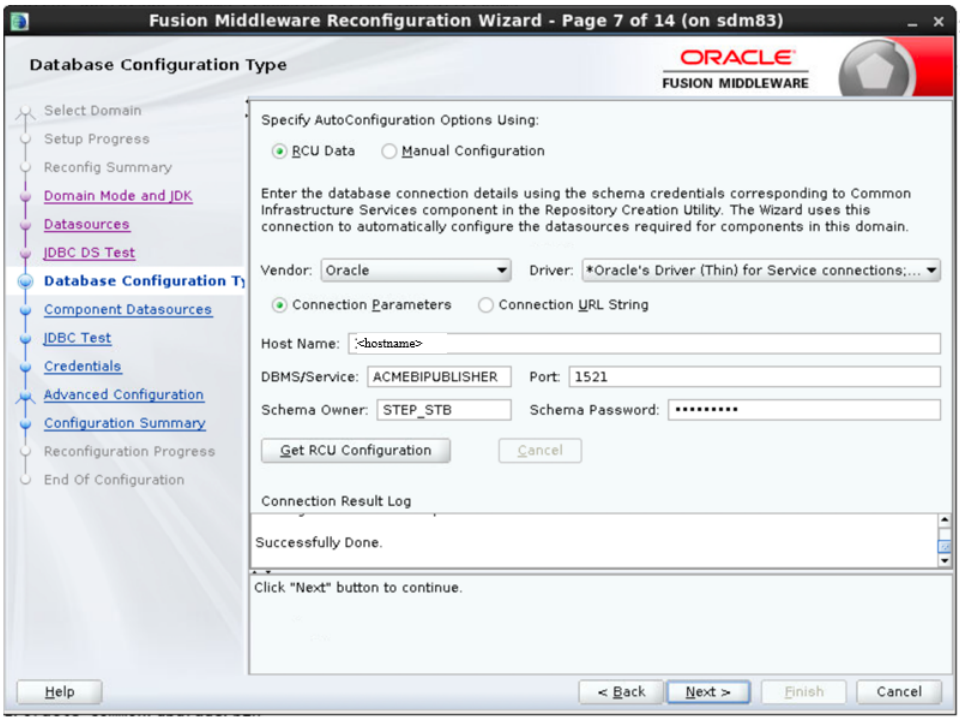
- Otherwise select RCU Data to connect to the Server Table (_STB) schema.

2. Enter the database connection details using the RCU service table (_STB) schema credentials as follows:

Table 5-8 Database Configuration Type

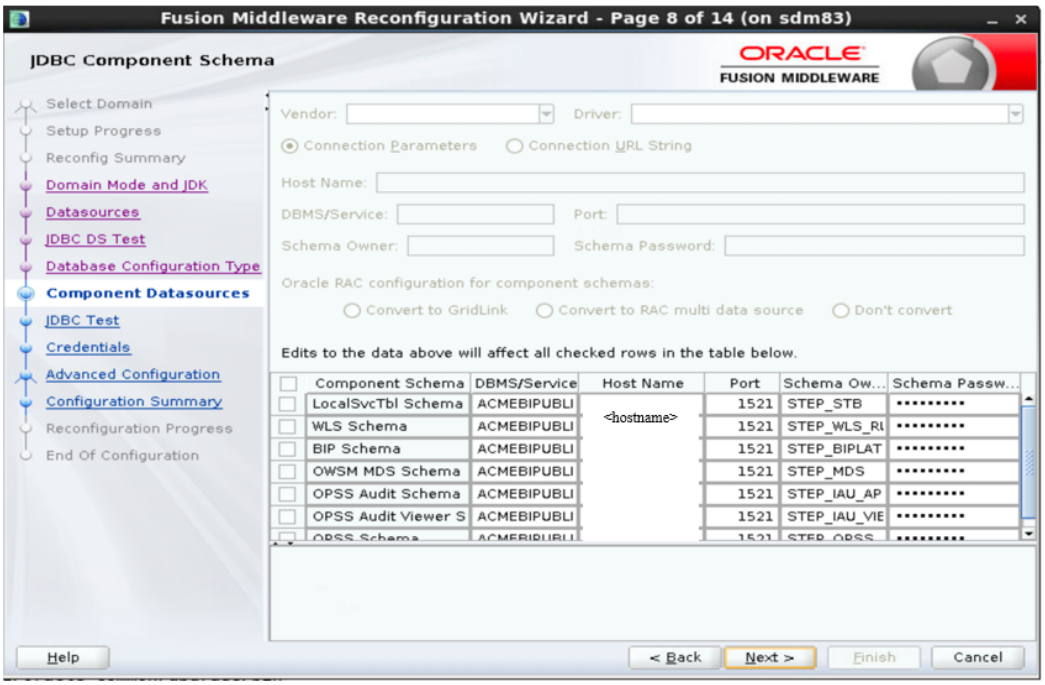
Fields	Description
Vendor	(Default) Oracle
Driver	(Default) *Oracle's Driver (Thin) for Service connections: Versions: Any
Host Name	(Default) <hostname>
DBMS/Service	(Default) ACMEBIPUBLISHER
Port	(Default) 1521
Schema Owner	(Default) STEP_STB
Schema Password	(Default) Password for Schema is filled

Figure 5-11 Database Configuration Type



3. Click **Get RCU Configuration**. The Reconfiguration Wizard uses this connection to automatically configure the data sources required for components in your domain.
4. On the **Component Datasources** screen, click **Next**.

Figure 5-12 Component Datasources



JDBC Test

Select all the component schemas and test the connection for each schema.

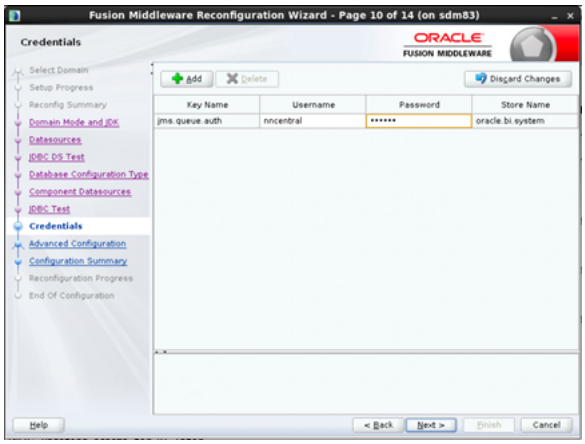
1. On the **JDBC Test** screen, select all the component schemas and click **Test Selected Connections** to test the connection for each schema. The result of the test is indicated in the **Status** column
2. After completion of the check, click **Next**.

Credentials

Enter the username and provide the password.

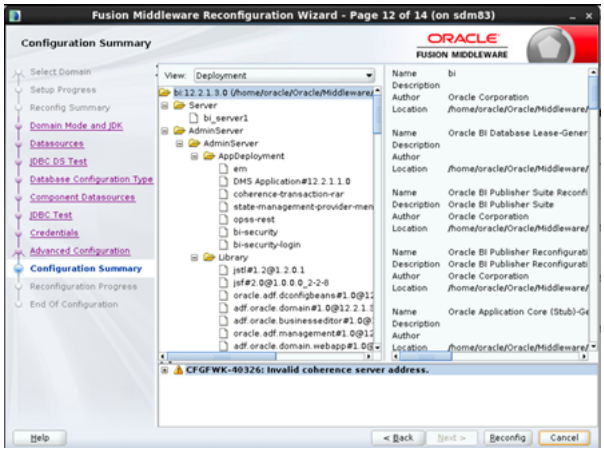
1. In the **Credentials** screen, enter the username as nncentral and provide the password.
2. Click **Next**.

Figure 5-13 Crendentials



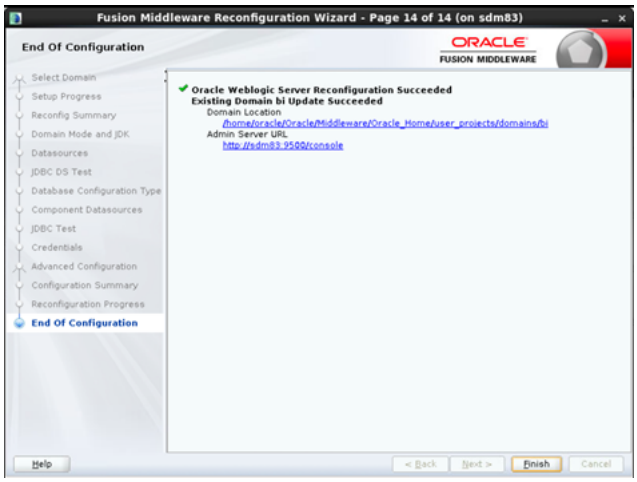
3. On the **Advanced Configuration** screen, select none of the options
4. Click **Next**.
5. On the **Configuration Summary** screen, review the detailed configuration settings of the domain before continuing, click **Reconfig**.

Figure 5-14 Configuration Summary



6. The **Reconfiguration Progress** screen displays the progress of the reconfiguration process.
7. When the progress bar shows 100%, click **Next**.
8. The **End of Configuration** screen indicates whether the reconfiguration process completed successfully or failed.
9. Click **Finish**.

Figure 5-15 End of Configuration



Upgrading Domain Component Configurations

After reconfiguring the domain, use the Upgrade Assistant to upgrade the domain component configurations in the domain to match the updated domain configuration.

To upgrade the 12.2.1.4.0 domain:

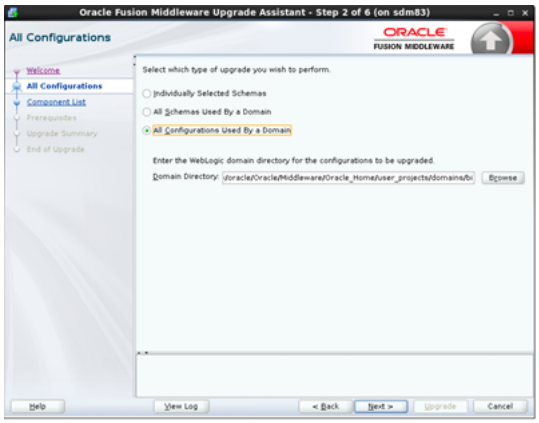
1. Go to the directory `oracle_common/upgrade/bin` of the new oracle home:

```
[oracle@vm]$ cd $NEW_ORACLE_HOME/oracle_common/upgrade/bin
[oracle@vm bin]$ ./ua
```

2. On the **Welcome** screen, review the introduction to the Upgrade Assistant and information about important pre-upgrade tasks, and click **Next**.
3. On the next screen:
   a. Select **All Configurations Used By a Domain**.
   b. In the **Domain Directory** field, enter the WebLogic domain directory path as given below, and click **Next**.:

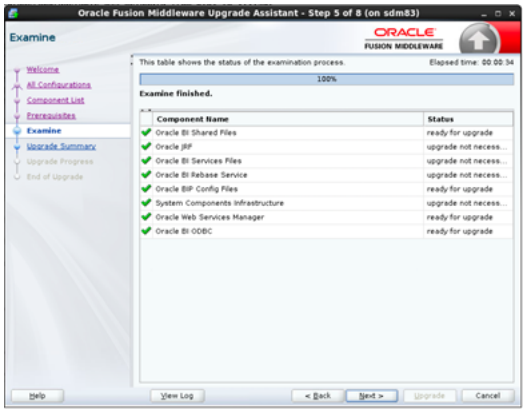
```
/home/oracle/Oracle/Middleware/Oracle_Home/user_projects/domains/bi/
```

Figure 5-16 All Configurations



4. On the **Component List** screen, verify that the list includes all the components for which you want to upgrade configurations and click **Next**.
5. On the **Prerequisites** screen, acknowledge that the prerequisites have been met by selecting all the check boxes. Click **Next**.
6. On the **Examine** screen, review the status of the Upgrade Assistant as it examines each component, verifying that the component configuration is ready for upgrade. If the status is Examine finished, click **Next**.

Figure 5-17 Examine Screen



7. On the **Upgrade Summary** screen, review the summary of the options you have selected for component configuration upgrade.

Figure 5-18 Upgrade Summary screen

8. Click **Upgrade** to start the upgrade process.
9. On the **Upgrade Progress** screen, monitor the status of the upgrade. The progress bar on this screen displays the progress of the current upgrade procedure, and click **Next**.
10. If the upgrade is successful, on the Upgrade Success screen, click **Close** to complete the upgrade and close the wizard.

Starting the Servers and Processes

This seciton contains information on how to Start the Fusion Middleware environment and Oracle BI instance and servers.

To start the Fusion Middleware environment and Oracle BI instance and servers:

1. As oracle user, go to the path:

```
[oracle@vm]$ cd /home/oracle/Oacle/Middleware/Oracle_Home/user_projects/
domains/bi/bitools/bin
```

2. Run this command:

```
[oracle@bin]$ ./start.sh
```