

Oracle® Business Intelligence Applications

Upgrading Business Intelligence Applications



12c (11.1.1.10.3 PS4)

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The Oracle logo, consisting of the word "ORACLE" in white, uppercase letters, centered within a solid red square.

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Oracle Business Intelligence Applications Upgrading Business Intelligence Applications, 12c (11.1.1.10.3 PS4)

F83294-05

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Preface

Oracle Business Intelligence Applications (Oracle BI Applications) is a comprehensive suite of prebuilt solutions.

It delivers pervasive intelligence across an organization, empowering users at all levels — from front line operational users to senior management - with the key information they need to maximize effectiveness. Intuitive and role-based, these solutions transform and integrate data from a range of enterprise sources and corporate data warehouses into actionable insights that enables more effective actions, decisions, and processes.

Oracle BI Applications is built on Oracle Analytics Server, a comprehensive set of enterprise business intelligence tools and infrastructure, including a scalable and efficient query and analysis server, an ad hoc query and analysis tool, interactive dashboards, proactive intelligence and alerts, and an enterprise reporting engine.

Audience

This document is intended for managers and implementers of Oracle BI Applications.

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Diversity and Inclusion

Oracle is fully committed to diversity and inclusion. Oracle respects and values having a diverse workforce that increases thought leadership and innovation. As part of our initiative to build a more inclusive culture that positively impacts our employees, customers, and partners, we are working to remove insensitive terms from our products and documentation. We are also mindful of the necessity to maintain compatibility with our customers' existing technologies and the need to ensure continuity of service as Oracle's offerings and industry standards evolve. Because of these technical constraints, our effort to remove insensitive terms is ongoing and will take time and external cooperation.

Related Documents

See the Oracle BI Applications documentation library for the complete set of Oracle BI Applications documents.

Conventions

These 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.
<code>monospace</code>	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Part I

Overview

Learn about upgrading to the latest release of Oracle BI Applications. Oracle provides tools and technology for the upgrade process.

Topics:

- [Upgrade Process – Overview and Prerequisites](#)

1

Upgrade Process – Overview and Prerequisites

This section provides an overview of the Oracle Business Intelligence Applications (Oracle BI Applications) upgrade process from all the previous releases to release 11.1.1.10.3 Patch Set 4.

Topics

- [Overview of Upgrade Process](#)
- [About In-Place and Out-of-Place Upgrades](#)
- [Upgrade Prerequisites](#)

Overview of the Upgrade Process

Oracle strongly recommends that you've a well-designed upgrade plan before you start the upgrade process. When you upgrade, the installer installs the newer release in a separate home.

Refer to the Oracle BI Applications [Certification Matrix](#) for the supported version of Oracle Analytics Server and the dependent Oracle Fusion Middleware components.

This upgrade pertains to data from:

- Oracle Data Integrator 12c (Release 12.2.1.4.0)
- Oracle Analytics Server
- Oracle Business Intelligence Applications Configuration Manager
- Oracle Business Analytics Warehouse

Upgrade Prerequisites

Review the Certification Matrix for Oracle BI Applications 11.1.1.10.3 PS4 release before you upgrade from Oracle BI Applications 11.1.1.10.2 or Oracle BI Applications 11.1.1.10.3 to the Oracle BI Applications 11.1.1.10.3 PS4 release and from all the earlier releases to the 11.1.1.10.3 PS4 release.

The Certification Matrix for Oracle BI Applications 11.1.1.10.3 PS4 release is available in the Oracle Fusion Middleware Supported System Configurations page.

You can upgrade from the Oracle BI Applications 11.1.1.10.3 release or the earlier releases. If you want to upgrade from the Oracle BI Applications 11.1.1.10.1 release and the earlier releases, you must first upgrade your earlier release to Oracle BI Applications 11.1.1.10.2 and then proceed with the upgrade to Oracle BI Applications 11.1.1.10.3 PS4.

You can perform direct upgrade from Oracle BI Applications 11.1.1.9.2 and 11.1.1.10.1 releases to Oracle BI Applications 11.1.1.10.3 PS4. See My Oracle Support document (ID 2939101.1).

See the recommendation in Certification Matrix and upgrade the database. Refer the instructions in the relevant database upgrade guide.

2

About In-Place and Out-of-Place Upgrades

If you want to upgrade to Oracle BI Applications 11.1.1.10.3 PS4, Oracle offers two types of upgrades based on the Oracle BI Applications release that you currently use.

Topics:

- [About In-Place Upgrade](#)
- [About Out-of-Place Upgrade](#)

About In-Place Upgrade

An in-place upgrade maintains your pre-upgrade Oracle home directory, but installs the new release binaries in a new Oracle home directory and upgrades the schemas in-place.

Oracle recommends in-place upgrade if you are upgrading from the Oracle BI Applications 11.1.1.10.3 release to the Oracle BI Applications 11.1.1.10.3 PS4 release (Oracle Fusion Middleware Infrastructure 12c to the latest update of Oracle Fusion Middleware Infrastructure 12c).



Note:

You must perform out-of-place upgrade if you want to upgrade from Oracle BI Applications 11.1.1.10.3 to Oracle BI Applications 11.1.1.10.3 PS4 having target RCU platform on the Oracle Autonomous Transaction Processing (ATP) Database.



Note:

1. If you are upgrading from Oracle BI Applications 11.1.1.10.3PS3 to 11.1.1.10.3PS4, make sure you apply the PB4 (Patch Bundle 4) before you perform the in-place upgrade.
2. If you are upgrading from Oracle BI Applications 11.1.1.10.3/11.1.1.10.3PS2 to 11.1.1.10.3PS4, make sure that you apply the PB2 (Patch Bundle 2) before you perform the in-place upgrade.

Complete these tasks to perform an in-place upgrade:

1. Read the certification document.
2. Prepare the machines for the application and database servers.
3. Back up content and customizations.
 - a. Back up the Oracle Data Integrator repository metadata schema and the customizations. See [Back Up the ODI Repository](#).

- If you want to upgrade from Oracle BI Applications 11.1.1.10.3 to Oracle BI Applications 11.1.1.10.3 PS4 to use the Oracle Autonomous Transaction Processing (ATP) Database.

Complete these tasks to perform an out-of-place upgrade:

1. Read the certification document.
2. Prepare the machines for the application and database servers.
3. Install the following prerequisite platforms. See the instructions in Install and Configure Oracle BI Applications.
 - Oracle WebLogic Server
 - Oracle Analytics Server
 - Oracle Data Integrator
 - Repository Creation Utility for Business Intelligence
4. Run the Oracle BI Applications installer:
 - a. Install Oracle BI Applications.
 - b. Install the Repository Creation Utility for Oracle BI Applications.
 - c. Apply the Oracle Fusion Middleware Platform patches.
5. Configure Oracle BI Applications by enabling the offerings using Oracle BI Applications Configuration Manager (BIACM).
6. Register the source using Oracle BI Applications Configuration Manager.
7. Recreate the customizations in Oracle Data Integrator.
8. Deploy the custom changes of the Oracle Data Integrator model on the warehouse schema.
9. Move the Oracle BI Applications Configuration Manager customizations to the new environment.
10. Move the Oracle BI customizations to the new environment.
11. Generate and run load plans using Oracle BI Applications Configuration Manager.

Part II

In-Place Upgrade

Oracle recommends in-place upgrade if you are upgrading from the Oracle BI Applications 11.1.1.10.3 release or later.

Topics:

- [Pre-Upgrade Tasks](#)
- [Upgrade Tasks](#)
- [Post-Upgrade Tasks](#)

3

Pre-Upgrade Tasks

Back up content before you upgrade.

Topics:

- [Back Up the ODI Repository](#)
- [Back Up the Oracle Business Intelligence Content](#)
- [Back Up ETL Source Files](#)

Back Up the ODI Repository

Before you upgrade, back up the ODI Repository of Oracle BI Applications 11.1.1.10.3.

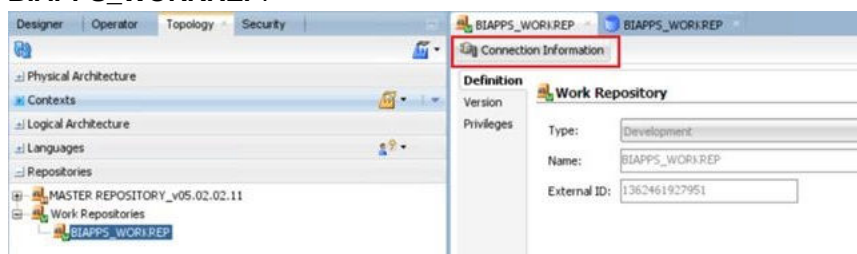
Use the Oracle Database Export and Import utilities to export the ODI Repository of Oracle BI Applications 11.1.1.10.3 from the existing schema and import it to another schema.

By retaining the ODI Repository of Oracle BI Applications 11.1.1.10.3, you can connect to the ODI Repository of Oracle BI Applications 11.1.1.10.3 whenever required. You need to create a connection in ODI to the backup of ODI Repository of Oracle BI Applications 11.1.1.10.3 that is now in a new database schema.

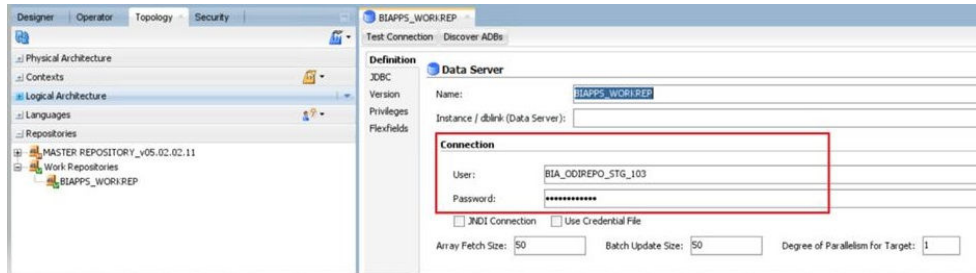
Create a Connection to the Oracle Data Integrator Backup Repository

Use Oracle Data Integrator Studio to create a connection to the backup of the Oracle BI Applications 11.1.1.10.3 Oracle Data Integrator Repository that's stored in a new database schema.

1. In Oracle Data Integrator Studio, configure a new connection to use the same Oracle Data Integrator user you used before for the Oracle BI Applications 11.1.1.10.3 Oracle Data Integrator Repository.
2. Configure the connection as a Master Repository connection.
3. Connect to the repository, select the **Topology** tab, click **Repositories**, and then select **BIAPPS_WORKREP**.



4. Edit the repository to change the database user details used by the Work Repository to use the new database schema.

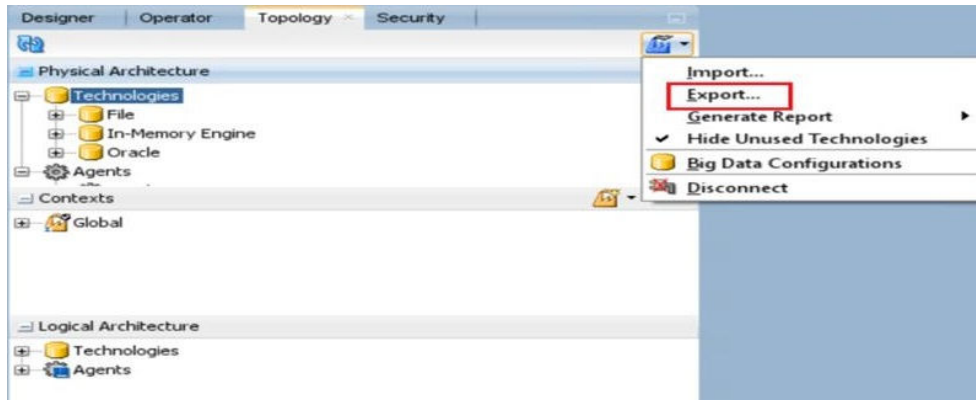


5. Disconnect from the repository, reconfigure the connection to include the Work Repository, connect, and verify that all details are correct.

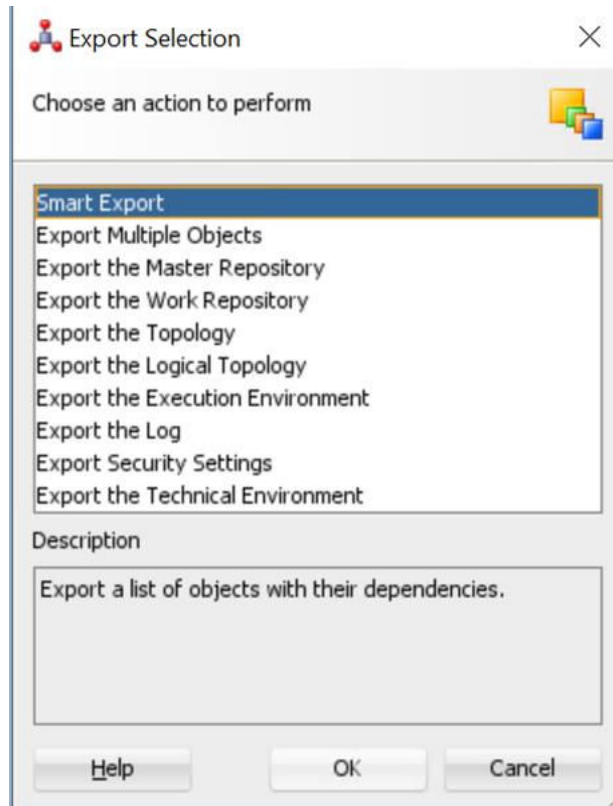
Export Oracle Data Integrator Repository Content

Export the content from the Oracle Data Integrator Repository of Oracle BI Applications 11.1.1.10.3 to a local directory.

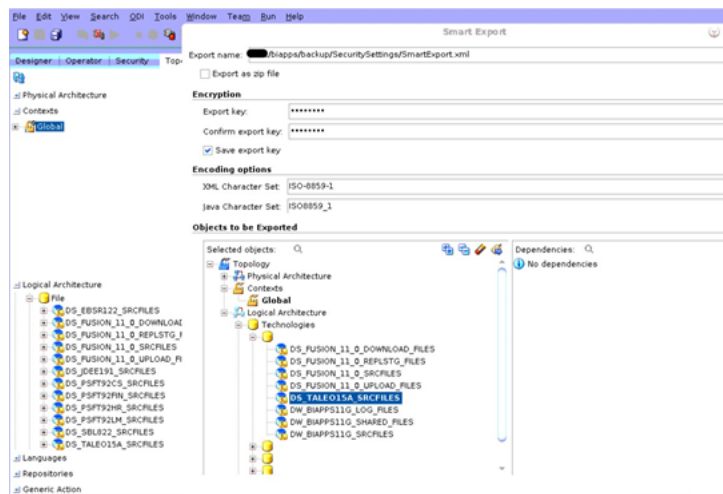
1. Launch the Oracle Data Integrator Studio client and connect to the Oracle Data Integrator repository of Oracle BI Applications 11.1.1.10.3, not the Oracle Data Integrator repository backup.
2. Select the **Topology** tab. From the **Connect Navigator** menu on the top right corner of the window, select **Export**.



3. Export connections.
 - a. In the Export Selection dialog, select **Smart Export** to launch the Smart Export wizard.

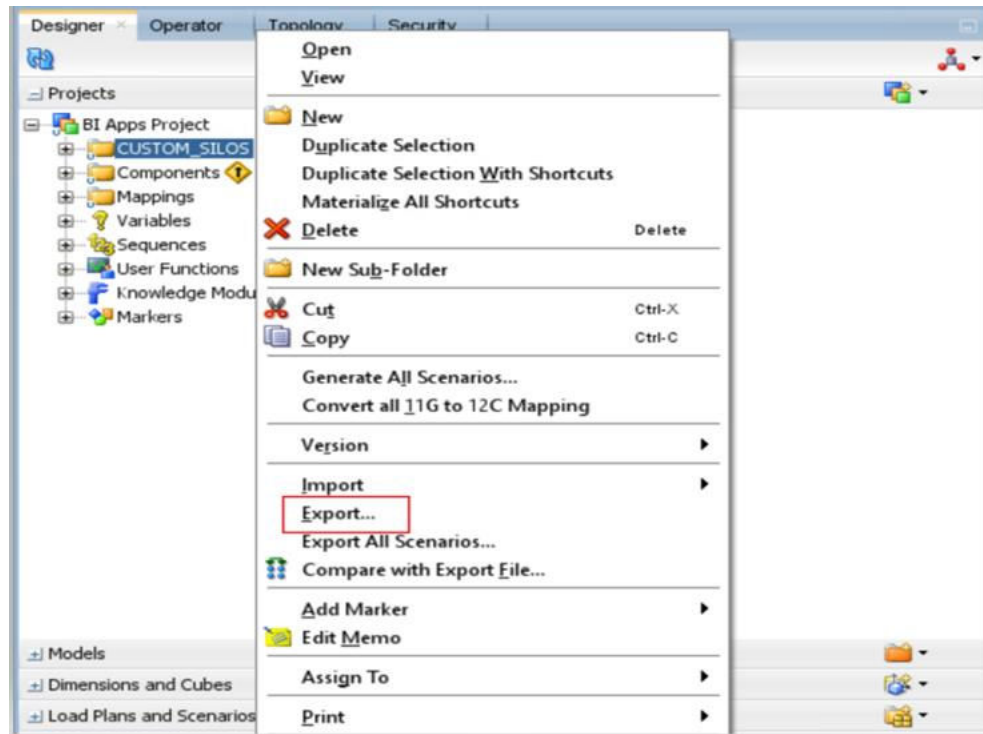


- b. Drag the **Global** context and **DS_TALEO15A_SRCFILES** into the **Objects to be Exported** window. Provide a meaningful name for the export file, and then click **Export**.



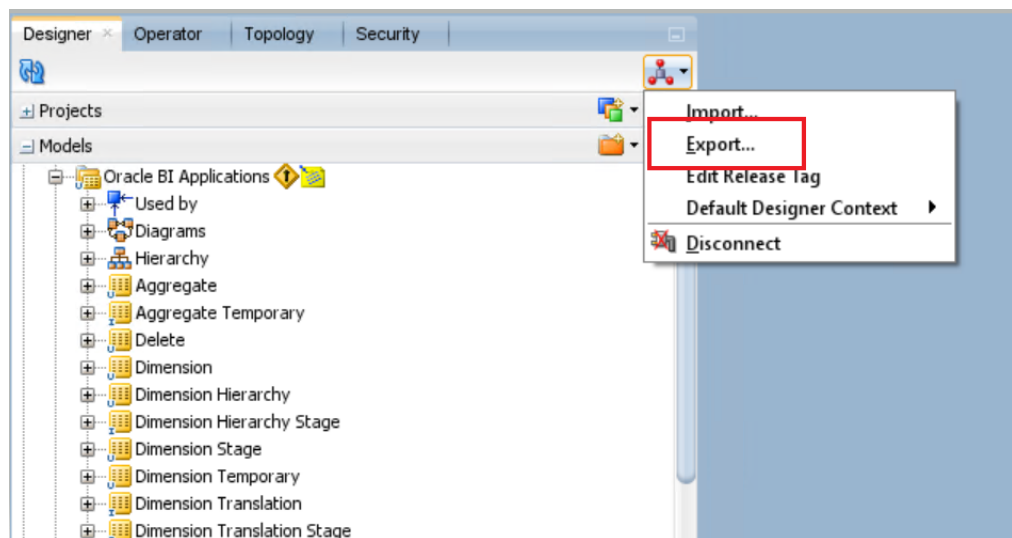
This exports the logical and physical topology including assigned Datasource Num ID values and database connection details.

4. Export the security details.
 - a. In the Export Selection dialog, select **Export Security Settings**.

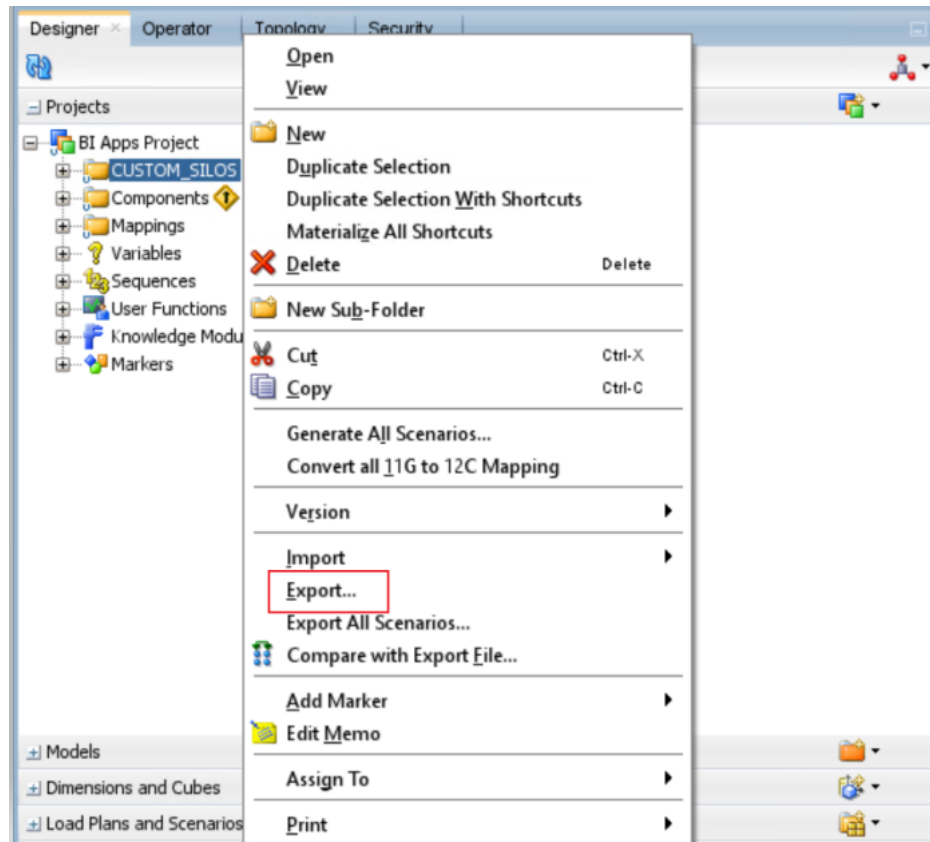


All custom and customized ETL tasks are in a separate CUSTOM folder.

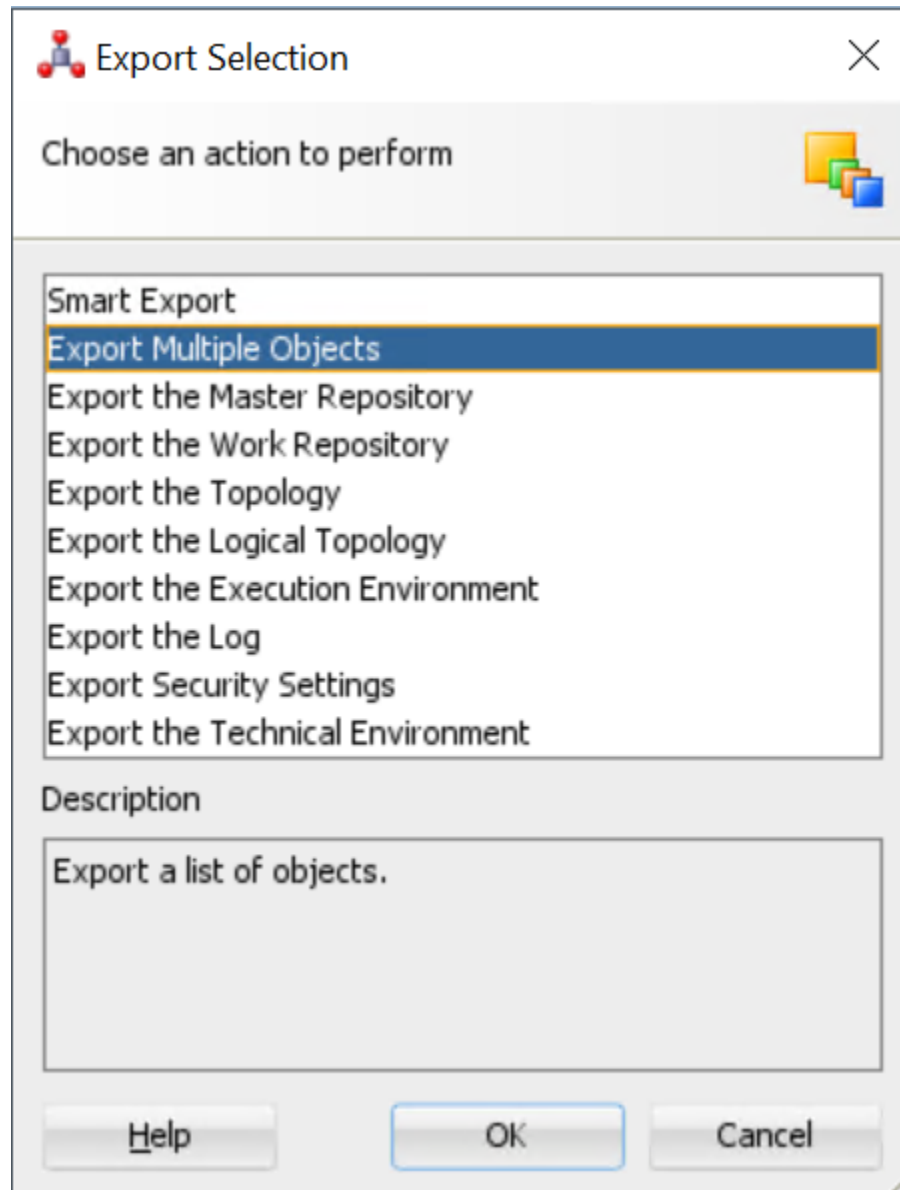
- b. In the next window, select **Child components export**.



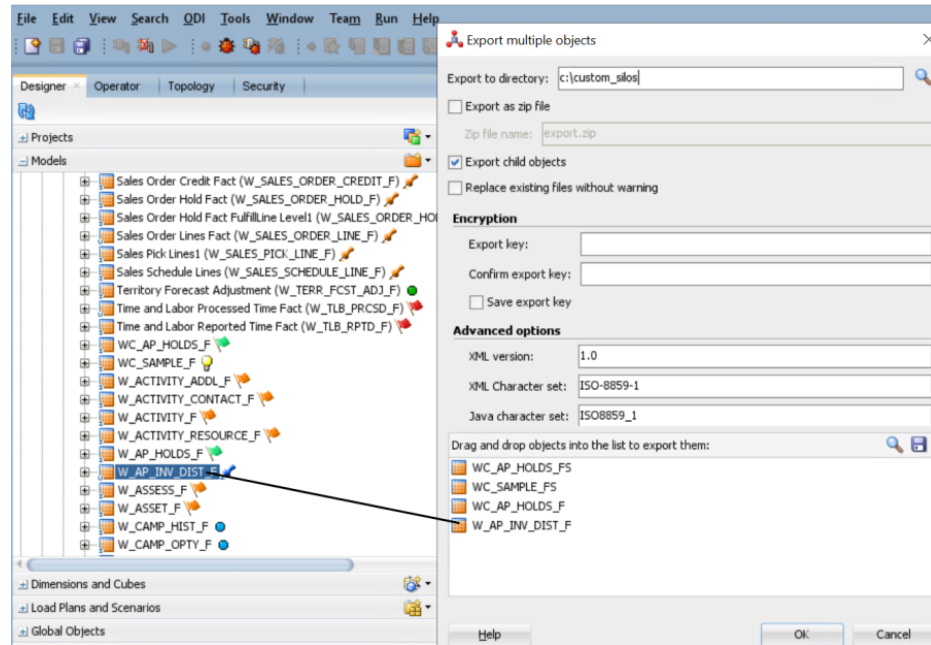
- 6. Export the customized data stores.
 - a. From the **Connect Navigator** menu on the top right corner of the window, select **Export**.



- b. In the Export Selection dialog, select **Export Multiple Objects**.



- c. Drag and drop your custom and customized data stores to the list to export. Make sure you select the **Export child objects** option.



Back Up the Oracle Business Intelligence Content

Back up the customizations in Oracle BI Applications and Oracle Business Intelligence catalog.

If you're moving the JAZN file, the repository, and the presentation catalog from Oracle BI Applications 11.1.1.10.3 that's based on Oracle BI Enterprise Edition 12c to Oracle BI Applications 11.1.1.10.3 PS4 that's based on Oracle Analytics Server, perform the following:

1. Back up the bar file from the Oracle BI Applications 11.1.1.10.3 Custom environment.
2. Back up the Oracle BI Applications 11.1.1.10.3 Repository customizations.
3. Back up the Oracle Business Intelligence Catalog customizations.

Back Up the Oracle Business Intelligence Custom Bar File

Back up the Oracle Business Intelligence custom bar file from the Oracle BI Applications 11.1.1.10.3 environment.

1. In your source system, navigate to:
 - (Linux) `DOMAIN_HOME/bitools/bin/`
 - (Windows) `DOMAIN_HOME\bitools\bin\`
2. Run the following command:

```
./exportarchive.sh <instance_name> <bar file location>
encryptionpassword=<password>
```

For example, `./exportarchive.sh biainstance 103Custombar encryptionpassword=Admin123`

Back Up the Oracle BI Applications Repository Customizations

Generate a patch for the repository of the Oracle BI Applications 11.1.1.10.3 environment.

1. Back up the baseline Oracle BI Applications 11.1.1.10.3 repository.

The baseline Oracle BI Applications 11.1.1.10.3 BAR file is present in the following location:

```
<ORACLE_HOME>/bi/biapps/admin/provisioning/  
OracleBIPresentationServicesComponent/OracleBIApps.bar
```

- a. Use the `expandarchive` command to extract the baseline Oracle BI Applications 11.1.1.10.3 repository from the BAR file.

Note:

The `expandarchive` command is available on the system where you have installed Oracle Analytics Server or the Oracle Analytics Client tool (Windows).

- If you are using the `expandarchive`, copy the baseline Oracle BI Applications 11.1.1.10.3 BAR file to the Windows system where you have installed the Oracle Analytics Client tool:

```
<OracleAnalyticsClienttool Install  
location>\bi\modules\oracle.bi.metadatalcm\scripts\expandarchive.cm  
d <BAR file path> <target folder where BAR file to be expanded>  
encryptionpassword= <password>
```

- On Oracle Analytics Server:

- Linux:

```
$ORACLE_HOME/bi/modules/oracle.bi.metadatalcm/scripts/  
expandarchive.sh <BAR file path> <target folder where BAR file  
to be expanded> encryptionpassword=<encryption password>
```

- Windows:

```
$ORACLE_HOME\bi\modules\oracle.bi.metadatalcm\scripts\expandarc  
hive.cmd <BAR file path> <target folder where BAR file to be  
expanded> encryptionpassword= <encryption password>
```

- b. Copy the baseline Oracle BI Applications 11.1.1.10.3 repository (default.rpd) to the Oracle BI Applications 11.1.1.10.3 system for comparison.

In the target folder where the BAR file is expanded, the baseline Oracle BI Applications repository is available in `/datamodel/rpd/default.rpd`.

2. Back up the custom Oracle BI Applications 11.1.1.10.3 repository.

In the Oracle BI Applications 11.1.1.10.3 system, download the custom repository.

- a. Navigate to `<DOMAIN_HOME>/bitools/bin`.
- b. Run the following command:

```
./datamodel.sh downloadrpd -O <Location> -si <service_instance> -  
u <username> -p <password>
```

For example,

```
./datamodel.sh downloadrpd -O /u01/BIAPPS103_Custom.rpd -si  
biainstance -u weblogic -p password
```

3. Compare the Baseline Oracle BI Applications 11.1.1.10.3 repository and the Custom Oracle BI Applications 11.1.1.10.3 repository. Generate a patch file to contain the differences between the baseline repository and the custom repository.
 - a. In the Oracle BI Applications 11.1.1.10.3 environment, navigate to `<DOMAIN_HOME>/bitools/bin`.
 - b. Run the following command:

```
./comparerpd.sh -P custom_pwd -C <CustomOracleBIApplications  
11.1.1.10.3 repository> -W Baseline_pwd -G <Baseline Oracle BI  
Applications 11.1.1.10.3 repository> -D patch.xml
```

For example,

```
./comparerpd.sh -P Admin123 -C BIAPPS103_Custom.rpd -W Admin123 -  
G BIAPPS103_Baseline.rpd -D patch.xml
```

Back Up Oracle Business Intelligence Catalog Customizations

Back up the Oracle Business Intelligence Catalog customizations from the Oracle BI Applications 11.1.1.10.3 environment.

As a standard practice, when you customize the pre-built content, make sure you save your customized content and reports in a separate `Shared Folders/Custom` folder. The Upgrade process preserves the content only in the `Shared Folders/Custom` folder.

1. Open the Analytics link of the Oracle BI Applications 11.1.1.10.3 environment using the URL format, `http://<hostname>:<port>/analytics`.
2. Click **Catalog** to view the content in the `Shared Folders/Custom` folder.
3. Archive the custom Analytics content in the `Shared Folders/Custom` folder.
 - a. Select the `Shared Folders/Custom` folder, and then click **Archive**.
 - b. Select **Keep Permissions** and **Keep Timestamps**.
 - c. Click **OK**.

Back Up ETL Source Files

Back up the ETL source files in the `Oracle_Home/bi/biapps/etl` directory to a location outside the Oracle Home directory where the ODI Agent deployed in the Oracle WebLogic Server can access.

When you install Oracle BI Applications, you install source files in the `Oracle_Home/bi/biapps/etl` directory. If you don't copy the ETL source files outside the Oracle Home directory, when you upgrade or patch Oracle BI Applications, the Oracle BI Applications are overwritten. Functional developers configure these Oracle BI Applications for use during the ETL process.

4

Upgrade Tasks

Install the pre-requisite software, and then upgrade schemas, domain, repository, ETL customizations and tasks, and ODI deployment plans.

Install JDK

To install the recommended JDK version, refer to the Oracle BI Applications certification matrix on Oracle Technology Network.

Refer to the JDK installation document for detailed instructions.



Note:

Ensure that you remove any other version of Java present in the system before installing JDK on your local machine and not in any NFS path.

You may set `JAVA_HOME` as the environment variable for further use. You may set `JAVA_HOME` as the environment variable for further use. Add `$JAVA_HOME/bin` in your `PATH` variable. You may use `/usr/sbin/alternatives --config java` to configure the recommended version as the default version of Java.

Install Oracle Fusion Middleware Infrastructure (WebLogic Server)

Oracle BI Applications requires Oracle Fusion Middleware Infrastructure 12.2.1.4.

1. Download the Oracle Fusion Middleware Infrastructure Installer from the [Download page for Oracle Fusion Middleware Software](#).
2. For Linux systems, review the general UNIX operating system requirements, and verify the locale and open file limit settings as described in [Oracle® Fusion Middleware System Requirements and Specifications 12c \(12.2.1.4.0\)](#). Oracle recommends a high value for `ulimit`. A low value of open file limit and the number of processes limit can cause installation failure. As the root user, do the following:
 - a. Edit the `/etc/security/limits.conf` file and save the following values.

```
* hard nofile 999999
* soft nofile 999999
* soft nproc 131072
* hard nproc 131072
* soft core unlimited
* hard core unlimited
```

The `nofile` values represent the open file limit; the `nproc` values represent the number of processes limit.

- b. Edit the `/etc/sysctl.conf` file and add following line to change the number of file descriptors.

```
fs.file-max = 26815744
```

- c. Run the following command to apply the view the settings.

```
sysctl -p
```

- d. Run the following command to verify if the value of `fs.file-max` is set to 26815744.

```
cat /proc/sys/fs/file-max
```

- e. Run the following command to view the PAM limits.

```
sudo vi /etc/pam.d/common-session
```

3. Copy the Oracle Fusion Middleware Infrastructure Installer to the middleware host and unzip it.
4. Set `JAVA_HOME`, and then start the Oracle WebLogic Server installation by using this command: `$JAVA_HOME/bin/java -jar fmw_12.2.1.4.0_infrastructure.jar`
5. Select the inventory location, such as `/scratch/biapps/installation/InvWLS` and click **OK**.
6. Select the Oracle Home location, such as `/scratch/biapps/Oracle/Middleware/NEW_ORACLE_HOME` and click **Next**.
7. Click **Next** until you complete the install steps.

Install Oracle Analytics Server

Install Oracle Analytics Server.

1. Download Oracle Analytics Server from the [Download page for Oracle Analytics Server](#).

Refer to the Oracle BI Applications certification matrix in the in the Oracle Fusion Middleware Supported System Configurations page for the supported version of Oracle Analytics Server.

2. Copy the Oracle Analytics Server Installer zip file to the middleware host, and unzip the file.
3. Install Oracle Analytics Server. See instructions in Installing the Oracle Analytics Server Software.
4. Make sure you've set `JAVA_HOME`, and then run the following command to start Oracle WebLogic Server:

```
For Linux: $JAVA_HOME/bin/java -jar  
Oracle_Analytics_Server_Linux_version-no.jar
```

```
For Windows: $JAVA_HOME/bin/java -jar  
Oracle_Analytics_Server_Linux_version-no.jar
```

Where `Oracle_Analytics_Server_Linux_version-no` is the name of the Oracle Analytics Server jar file downloaded from edelivery.

5. Select the same `NEW_ORACLE_HOME` location as provided for Oracle Fusion Middleware Infrastructure, for example, `/scratch/biapps/Oracle/Middleware/NEW_ORACLE_HOME`.
6. Click **Next** until you complete the install steps.

Install Oracle Data Integrator

Install Oracle Data Integrator using the Oracle Data Integrator installer.

1. Download Oracle Data Integrator 12.2.1.4 from the [Oracle Data Integrator Downloads](#) page.
2. Copy the Oracle Data Integrator 12.2.1.4 zip file to the middleware host, and unzip the file.
3. Make sure you have set `JAVA_HOME`, and then run the following command to start Oracle WebLogic Server:

```
$JAVA_HOME/bin/java -jar fmw_12.2.1.4.0_odi.jar
```
4. Select the same `NEW_ORACLE_HOME` location as provided for Oracle Fusion Middleware Infrastructure, for example, `/scratch/biapps/Oracle/Middleware/NEW_ORACLE_HOME`.
5. Make sure you select **Enterprise Install**.
6. Click **Next** until you complete the install steps.

Install Oracle BI Applications

Install Oracle BI Applications 11.1.1.10.3 PS4 using the installer.

1. Download the installer (`jar` file) from the [Oracle Business Intelligence Applications Downloads](#) page.

You see two `jar` files. Ensure you keep both the `jar` files in the same directory.

2. Prepare a text file (known as response file) using the name `biapps.resp` with the contents seen in the sample response file:

```
[ENGINE]
#DO NOT CHANGE THIS.
Response File Version=1.0.0.0.0
[GENERIC]
#provide oracle home location, where the product would be installed.
ORACLE_HOME=/scratch/biapps/Oracle/Middleware/NEW_ORACLE_HOME
```

3. Run the installer:

```
$ java -jar obia.12c.distribution-11.1.1.10.PS4-generic.jar -silent -
responseFile /tmp/biapps.resp -invPtrLoc oraInst.loc
```

Note:

Ensure that the **responseFile** parameter value is an absolute file path and not a relative path. Use a command for the `jar` file which doesn't have 2 in the filename of the `responseFile`.

Upgrade OPatch

Upgrade OPatch to the latest release on the `ORACLE_HOME` location where you installed Oracle Fusion Middleware Infrastructure.

1. Download the latest patches from the same location where you downloaded the Oracle BI Applications software, save the latest patches to a location, and unzip them.

2. Set `ORACLE_HOME` as the parent of product home.

For example, `setenv ORACLE_HOME /scratch/biapps/Middleware/ORACLE_HOME PATH`

3. Locate the `opatch_generic.jar` file in the folder where you have unzipped the latest patch, and apply it.

For example, `java -jar path_to_opatch_generic.jar/opatch_generic.jar -silent oracle_home=ORACLE_HOME PATH`

Apply Mandatory Patches

After the software-only install, you must apply patches on the `ORACLE_HOME` location where you installed Oracle Fusion Middleware Infrastructure 12.2.1.4.

All patches are available in the same place from where you downloaded the Oracle BI Applications software.

1. Copy the patches to a location, unzip them, and apply them using the instructions in the patch README file.

2. Set `ORACLE_HOME` as the parent of product home.

For example, `setenv ORACLE_HOME/scratch/biapps/Middleware/ORACLE_HOME`

Don't set it as `/scratch/biapps/Middleware/Oracle_home/odi`.

3. Run the `$ORACLE_HOME/OPatch/opatch apply <patch_dir>` command for all individual mandatory patches available in all the sub directories.

4. Verify each patch log and ensure that you see the "OPatch Succeeded" message.

5. Run the `$ORACLE_HOME/OPatch/opatch lsinventory` command, take output in a file, and verify that each patch number appears in that file as applied.

Run Pre-Upgrade Readiness Check

Oracle recommends that you run a readiness check before you start the upgrade process.

1. Starting the Upgrade Assistant in Readiness Mode.

- a. Go to the `NEW_ORACLE_HOME/oracle_common/upgrade/bin` directory.

- b. Run the command: `./ua -readiness`

2. On the Welcome screen, review information about the readiness check. Click **Next**.

3. On the Readiness Check Type screen, select **Individually Selected Schemas**, and then click **Next**.
4. On the Available Components screen, make sure you don't select **Oracle Data Integrator** and **User Messaging Service (UMS)** schemas for pre upgrade readiness check, and then click **Next**.
5. On the Domain Directory screen, enter the existing 11.1.1.10.3 install domain directory and click **Next**.
View all the schemas one after another, and you need to enter DBA password, schema passwords.
6. On the Readiness Summary screen, review the summary of the readiness checks that will be performed based on your selections, and click **Next**.
7. On the Readiness Check screen, review the status of the readiness check. The process can take several minutes. When the readiness check is complete, click **Continue**.
8. Make sure readiness check is successful.

Upgrade Product Schemas Using the Upgrade Assistant

After stopping servers and processes, use the Upgrade Assistant to upgrade supported product schemas to the current release of Oracle Fusion Middleware.

1. Stop your Oracle Fusion Middleware environment.
 - a. Go to the `Existing_DOMAIN_HOME/bitools/bin` directory.
 - b. Run `stop.cmd` (Windows) or `stop.sh` (Linux) to stop the Oracle BI instance and servers.
2. Start the Upgrade Assistant.
 - a. Go to the `NEW_ORACLE_HOME/oracle_common/upgrade/bin` directory.
 - b. Run the command: `./ua`
3. On the Welcome screen, review information. Click **Next**.
4. On the Selected Schemas screen, select **Individually Selected Schemas**, and then click **Next**.
5. On the Available Components screen, make sure you don't select **Oracle Data Integrator** and **User Messaging Service (UMS)** schemas for pre upgrade readiness check, and then click **Next**.
6. On the Domain Directory screen, enter the existing 11.1.1.10.3 install domain directory and click **Next**.
View all the schemas one after another, and you need to enter DBA password, schema passwords.
7. On the Prerequisites screen, acknowledge that the prerequisites have been met by selecting all the check boxes. Click **Next**.
8. On the BIPLATFORM Schema screen, the system automatically populates data in the other fields from the existing 12c schema. Enter the database administrator account: DBA username and password for the database containing the BIEE_PLATFORM schema and click **Connect**. When you see the message "Connection to database successfully completed", click **Next**.

9. On the OPSS Schema screen, the system automatically populates data in the other fields from the existing 12c schema. Enter the database administrator account: DBA username and password for the database containing the BIEE_OPSS schema and click **Connect**. When you see the message “Connection to database successfully completed”, click **Next**.
10. On the IAU Schema screen, the system automatically populates data in the other fields from the existing 12c schema. Enter the database administrator account: DBA username and password for the database containing the BIEE_IAU schema and click **Connect**. When you see the message “Connection to database successfully completed”, click **Next**.
11. On the STB Schema screen, the system automatically populates data in the other fields from the existing 12c schema. Enter the database administrator account: DBA username and password for the database containing the BIEE_STB schema and click **Connect**. When you see the message “Connection to database successfully completed”, click **Next**.
12. On the WLS Schema screen, the system automatically populates data in the other fields from the existing 12c schema. Enter the database administrator account: DBA username and password for the database containing the BIEE_WLS_RUNTIME schema and click **Connect**. When you see the message “Connection to database successfully completed”, click **Next**.
13. On the Examine screen, review the status of the Upgrade Assistant as it examines each schema, verifying that the schema is ready for upgrade. If the status is Examine finished, click Next. If the examine phase fails, Oracle recommends that you cancel the upgrade by clicking **No** in the Examination Failure dialog. Click **View Log** to see what caused the error.
14. On the Upgrade Summary screen, review the summary of the schemas that will be upgraded and/or created. Verify that the correct Source and Target Versions are listed for each schema you intend to upgrade. If you want to save these options to a response file to run the Upgrade Assistant again later in response (or silent) mode, click **Save Response File** and provide the location and name of the response file. A silent upgrade performs exactly the same function that the Upgrade Assistant performs, but you do not have to manually enter the data again. Click **Next**.
15. On the Upgrade Progress screen, monitor the status of the upgrade, and then Click **Next**.
16. If the upgrade is successful: On the Upgrade Success screen, click **Close** to complete the upgrade and close the wizard. If the upgrade fails: On the Upgrade Failure screen, click **View Log** to view and troubleshoot the errors.

Back Up the mapViewerConfig.xml File

The mapViewerConfig.xml file is overwritten by the reconfiguration templates when you run the Reconfiguration Wizard. Therefore, you must back up the mapViewerConfig.xml file before reconfiguring your existing domain.

1. Change directory to the location of the mapViewerConfig.xml file.

```
cd EXISTING_DOMAIN_HOME/config/fmwconfig/mapviewer/conf
```
2. Copy the mapViewerConfig.xml file.


```
cp EXISTING_DOMAIN_HOME/config/fmwconfig/mapviewer/conf/
mapViewerConfig.xml EXISTING_DOMAIN_HOME/config/fmwconfig/
mapviewer/conf/mapViewerConfig_orig.xml
```

A copy of the `mapViewerConfig.xml` file is created with the filename `'mapViewerConfig_orig.xml'`.

Reconfigure the Oracle BI Domain with the Reconfiguration Wizard

Navigate through the screens in the Reconfiguration Wizard to reconfigure your existing domain.

1. Go to the `oracle_common/common/bin` directory.
 - (Linux) `NEW_ORACLE_HOME/oracle_common/common/bin`
 - (Windows) `NEW_ORACLE_HOME\oracle_common\common\bin`

`NEW_ORACLE_HOME` is the location where you installed Oracle BI Applications 11.1.1.10.3 PS4.
2. Start the Reconfiguration Wizard.
 - (Linux) `./reconfig.sh`
 - (Windows) `reconfig.cmd`
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. Click **Next**.
4. On the Reconfiguration Setup Progress screen, view the progress of the setup process. When complete, click **Next**.

During this process:

- The reconfiguration templates for your installed products, including Fusion Middleware products, are automatically applied. This updates various domain configuration files such as `config.xml`, `config-groups.xml`, and `security.xml` (among others).
 - Schemas, scripts, and other such files that support your Fusion Middleware products are updated.
 - The domain upgrade is validated.
5. On the Reconfiguration Summary screen, review the reconfigured templates, and click **Next**.
 6. On the Domain Mode and JDK screen, select **Production** as the domain mode, and select the JDK to use in the domain or click **Browse** to navigate to the JDK you want to use. Click **Next**.

Check the supported JDK version in the Certification Matrix.

7. On the JDBC Data Sources screen, configure the JDBC data sources defined in your domain source.

The JDBC data sources associated with the products for which you are creating the domain are listed in the lower half of the screen. A JDBC data source contains a pool of database connections that are created when the data source instance is created, deployed or targeted, or at server start up. Applications look up a data source on the

JNDI tree, and then request a connection. When the applications no longer need the connections, they return the connections to the connection pool in the data source.

From the **Data Source Name** drop-down list, select the data source(s) for which you want to specify the settings. The values that you specify are displayed in the appropriate columns in the data source list, for the selected data source.

For more information about each option, click **Help**.

After specifying the details, click **Next**.

 **Note:**

In case you reconfigure the connection pools connecting to Autonomous Data Warehouse (ADW) target, see My Oracle Support Document (ID 2808444.1).

8. On the JDBC Data Sources 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 data source connection.

 **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 data sources. Click **Next** to continue.

9. On the Database Configuration Type screen, select **RCU Data** to connect to the Server Table (_STB) schema.

Enter the database connection details using the RCU service table (_STB) schema credentials and click **Get RCU Configuration**.

The Reconfiguration Wizard uses this connection to automatically configure the data sources required for components in your domain.

 **Note:**

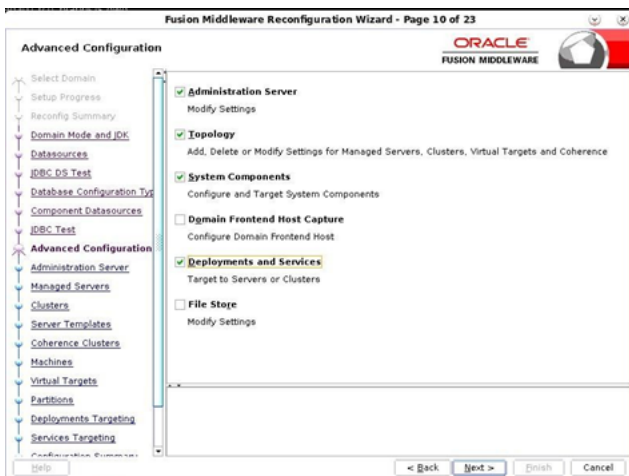
By default **Oracle's Driver (Thin) for Service connections; Versions: Any** is the selected driver. If you specified an instance name in your connection details — instead of the service name — you must select **Oracle's Driver (Thin) for pooled instance connections; Versions: Any** If you do not change the driver type, then the connection will fail.

If the check is successful, click **Next**. If the check fails, reenter the connection details correctly and try again.

10. On the JDBC Component Schema 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.

When the check is complete, click **Next**.

11. On the Advanced Configuration screen, you can select all categories for which you want to perform advanced configuration. For each category you select, the appropriate configuration screen is displayed to allow you to perform advanced configuration.



12. On Administration Server screen, review and provide the server details, and click **Next**. Change the Listen Address from "All Local Addresses" to the server IP address.
13. On Managed Servers screen, review and provide the managed server details, and click **Next**.
14. On Clusters screen, review and provide the cluster details, and click **Next**.
15. On Server Templates screen, review the server templates, and click **Next**.
16. On Dynamic Servers screen, review the dynamic servers, and click **Next**.
17. On Assign Servers to Clusters screen, review clusters, and click **Next**.
18. On Coherence Clusters screen, review coherence clusters, and click **Next**.
19. On Machines screen, change the Node Manager Listener Address to Server IP address, and click **Next**.
20. On Assign Servers to Machines screen, review the machines, and click **Next**.
21. On System Components screen, review the system components, and click **Next**.
22. On Assign System Components to Machines screen, review the machines, and click **Next**.
23. On Deployment Target screen, review the deployments and deployment targets and click **Next**.
24. On Services Target screen, review the services and deployment targets, and click **Next**.
25. On the Configuration Summary screen, review the detailed configuration settings of the domain before continuing, and click **Next**.

You can limit the items that are displayed in the right-most panel by selecting a filter option from the **View** drop-down list.

To change the configuration, click **Back** to return to the appropriate screen. To reconfigure the domain, click **Reconfig**.

 **Note:**

The location of the domain doesn't change when you reconfigure it.

26. The Reconfiguration Progress screen displays the progress of the reconfiguration process.

During this process:

- Domain information is extracted, saved, and updated.
- Schemas, scripts, and other such files that support your Fusion Middleware products are updated.

When the progress bar shows 100%, click **Next**.

27. The End of Configuration screen indicates whether the reconfiguration process completed successfully or failed. It also displays the location of the domain that was reconfigured as well as the Administration Server URL (including the listen port). If the reconfiguration is successful, it displays **Oracle WebLogic Server Reconfiguration Succeeded**.

If the reconfiguration process did not complete successfully, an error message is displayed indicates the reason. Take appropriate action to resolve the issue. If you can't resolve the issue, contact My Oracle Support.

Note the Domain Location and the Admin Server URL for further operations.

Restore the mapViewerConfig.xml File

The mapViewerConfig.xml file is overwritten when you run the Reconfiguration Wizard on your domain. You can know that the mapViewerConfig.xml file is overwritten by checking its file size. You must restore the original file that you backed up before upgrading your domain with the Upgrade Assistant.

1. Change to the `EXISTING_DOMAIN_HOME/config/fmwconfig/mapviewer/conf` directory.
2. Enter the `ls -ltr` command to list the files within this directory and check the file size of the mapViewerConfig.xml file

 **Note:**

The change in the file size implies that the mapViewerConfig.xml file is overwritten by the reconfiguration template.

3. Restore the original file by renaming the mapViewerConfig_original.xml to mapViewerConfig.xml.
4. Enter the `ls -ltr` command to list the files again and check the file size of the mapViewerConfig.xml file.

The file size of the mapViewerConfig.xml file should now match with the file size you obtained while backing up the mapViewerConfig.xml file.

Upgrade Domain Components Using the Upgrade Assistant

Use the Upgrade Assistant to upgrade the domain component configurations inside the domain to match the updated domain configuration.

1. Start the Upgrade Assistant.
 - a. Go to the `NEW_ORACLE_HOME/oracle_common/upgrade/bin` directory.
 - b. Run the command: `./ua`
2. On the Welcome screen, review an introduction to the Upgrade Assistant and information about important pre-upgrade tasks. Click **Next**.
3. On the next screen:
 - Select **All Configurations Used By a Domain**. The screen name changes to WebLogic Components.
 - In the **Domain Directory** field, enter the WebLogic domain directory path.

Click **Next**.

4. On the Component List screen, verify that the list includes all the components for which you want to upgrade configurations and click **Next**.

If you do not see the components you want to upgrade, click **Back** to go to the previous screen and specify a different domain.

5. On the Prerequisites screen, acknowledge that the prerequisites have been met by selecting all the check boxes. Click **Next**.
6. On the MapViewer Configuration screen, select **12c** and click **Next**.
7. On the Bar backup location screen, provide a location outside domain and `oracle_home` to store the metadata backup, and click **Next**.
8. 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**.

If the examine phase fails, Oracle recommends that you cancel the upgrade by clicking **No** in the Examination Failure dialog. Click **View Log** to see what caused the error and refer to *Troubleshooting Your Upgrade in Upgrading with the Upgrade Assistant* for information on resolving common upgrade errors.

Note:

- If you resolve any issues detected during the examine phase without proceeding with the upgrade, you can start the Upgrade Assistant again without restoring from backup. However, if you proceed by clicking **Yes** in the Examination Failure dialog box, you need to restore your pre-upgrade environment from backup before starting the Upgrade Assistant again.
- Canceling the examination process has no effect on the configuration data; the only consequence is that the information the Upgrade Assistant has collected must be collected again in a future upgrade session.

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

The response file collects and stores all the information that you have entered, and enables you to perform a silent upgrade at a later time. The silent upgrade performs exactly the same function that the Upgrade Assistant performs, but you do not have to manually enter the data again. If you want to save these options to a response file, click **Save Response File** and provide the location and name of the response file.

Click **Upgrade** to start the upgrade process.

10. On the Upgrade Progress screen, monitor the status of the upgrade.

 **Caution:**

Allow the Upgrade Assistant enough time to perform the upgrade. Do not cancel the upgrade operation unless absolutely necessary. Doing so may result in an unstable environment.

If any components are not upgraded successfully, refer to the Upgrade Assistant log files for more information.

 **Note:**

The progress bar on this screen displays the progress of the current upgrade procedure. It does not indicate the time remaining for the upgrade.

Click **Next**.

11. If the upgrade is successful: On the Upgrade Success screen, click **Close** to complete the upgrade and close the wizard. The Post-Upgrade Actions window describes the manual tasks you must perform to make components functional in the new installation. This window appears only if a component has post-upgrade steps.

If the upgrade fails: On the Upgrade Failure screen, click **View Log** to view and troubleshoot the errors. The logs are available at `NEW_ORACLE_HOME/oracle_common/upgrade/logs`.

 **Note:**

If the upgrade fails you must restore your pre-upgrade environment from backup, fix the issues, then restart the Upgrade Assistant.

Start Servers and Processes

After you upgrade, start the Oracle Analytics Server instance, Administration Servers, Managed Servers, and the Node Manager.

Note:

The procedure in this section describe how to start servers and processes using the WLST command-line utility or a script. You can also use the Fusion Middleware Control and the Oracle WebLogic Server Administration Console.

To start your Oracle Fusion Middleware environment:

1. Change to the following directory:
 - (Linux) `Existing_DOMAIN_HOME/bitools/bin`
 - (Windows) `Existing_DOMAIN_HOME\bitools\bin`
2. To start the Oracle Analytics Server instance and servers, enter the following command:
 - (Linux) `start.sh`
 - (Windows) `start.cmd`

Verify the Domain-Specific-Component Configurations Upgrade

To verify that the domain-specific-component configurations upgrade was successful, sign in to the Administration console and the Oracle Enterprise Manager Fusion Middleware Control and verify that the version numbers for each component is as mentioned in the Certification Matrix.

Note:

After upgrade, make sure you run the administration tools from the new Oracle home directory and not from the previous Oracle home directory.

During the upgrade process, some OWSM documents, including policy sets and predefined documents such as policies and assertion templates, may need to be upgraded. If a policy set or a predefined document is upgraded, its version number is incremented by 1.

1. To sign in to the Administration Console, go to: `http://administration_server_host:administration_server_port/console`.
2. To sign in to the Oracle Enterprise Manager Fusion Middleware Control Administration Console, go to: `http://administration_server_host:administration_server_port/em`

Configure Oracle Data Integrator Deployment Plan

Update the deployment plan files for Oracle Data Integrator console and Oracle Data Integrator agent.

1. Stop your Oracle Fusion Middleware environment.
2. Go to the `<Existing_DOMAIN_HOME>/bitools/bin` directory.
3. Run `stop.cmd` (Windows) or `stop.sh` (Linux) to stop the Oracle BI instance and servers.
4. Run the command: `cd <NEW_ORACLE_HOME>/bi/biapps/scripts`
5. Edit `input.txt` to update `biprov.oracle_home.dir` to `<NEW_ORACLE_HOME>` and add `biprov.bi_domain.dir` with `<DOMAIN_HOME>` value.
6. Run the Oracle WebLogic Server scripting tool: `<NEW_ORACLE_HOME>/oracle_common/common/bin/wlst.sh <NEW_ORACLE_HOME>/bi/biapps/scripts/configure_odi_deployment_plan.py <NEW_ORACLE_HOME>/bi/biapps/scripts/input.txt`
7. Rename the `wlsforce.jar` file in `<NEW_ORACLE_HOME>/oracle_common/modules/datadirect` directory. For example, `mv wlsforce.jar wlsforce.jar.orig`
8. Start your Oracle Fusion Middleware environment.
9. Go to the `<Existing_DOMAIN_HOME>/bitools/bin` directory
10. Run `start.cmd` (Windows) or `start.sh` (Linux) to start the Oracle BI instance and servers.

Configure Server Start Parameters

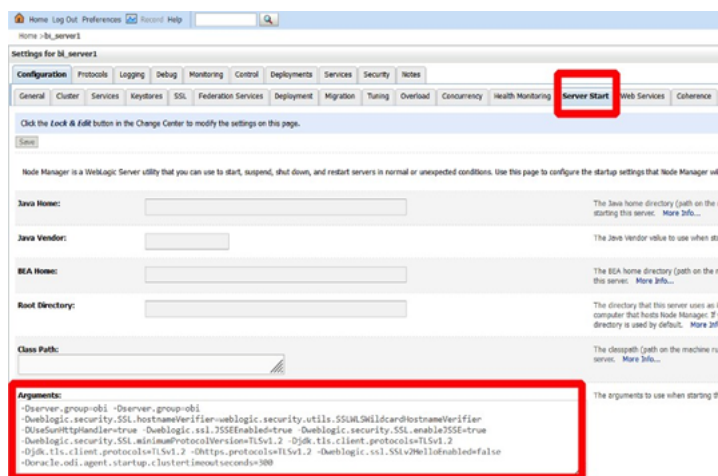
Use the Oracle WebLogic Server Administration Console to configure how the BI server and ODI server start.

1. Log in to Oracle WebLogic Server Administration Console.
URL format:`http://administration_server_host:administration_server_port/console`
2. In the Change Center, click **Lock & Edit**.
3. Navigate to **Servers**, select the BI server (for example, `bi_server1`), and then select the Server Start tab.
4. In the arguments field, verify the following properties, and save.

```
-Dserver.group=obi
-
Dweblogic.security.SSL.hostnameVerifier=weblogic.security.utils.SSLW
LSWildcardHostnameVerifier
-DUseSunHttpHandler=true
-Dweblogic.ssl.JSSEEnabled=true
-Dweblogic.security.SSL.enableJSSE=true
-Dweblogic.security.SSL.minimumProtocolVersion=TLSv1.2
-Djdk.tls.client.protocols=TLSv1.2
```



```
-Djdk.tls.client.protocols=TLSv1.2
-Dhttps.protocols=TLSv1.2
-Dweblogic.ssl.SSLv2HelloEnabled=false
-Doracle.odi.agent.startup.clustertimeoutseconds=300
```



5. Navigate to **Servers**, select the ODI server (for example, ODI_server1), and then select the Server Start tab.
6. In the arguments field, verify the following properties, and save.

```
-Dserver.group=bia_odi
-Doracle.odi.coherence.wka1=<hostname>
-Dtangosol.coherence.localhost=<hostname>
-
Djavax.xml.parsers.SAXParserFactory=com.sun.org.apache.xerces.internal.jaxp.SAXParserFactoryImpl
-Doracle.odi.agent.startup.clustertimeoutseconds=300
-Dtangosol.coherence.localport=29066
-Doracle.odi.coherence.wka1.port=29066
```

Settings for ODI_server1

Configuration Protocols Logging Debug Monitoring Control Deployments Services Security Notes

General Cluster Services Keystores SSL Federation Services Deployment Migration Tuning Overload Concurrency Health Monitoring **Server Start**

Click the **Lock & Edit** button in the Change Center to modify the settings on this page.

Save

Node Manager is a WebLogic Server utility that you can use to start, suspend, shut down, and restart servers in normal or unexpected conditions. Use this page to configure the startup to start this server on a remote machine.

Java Home: The Java home running Node server. [More...](#)

Java Vendor: The Java Vendor server. [More...](#)

BEA Home: The BEA home running Node server. [More...](#)

Root Directory: The directory that hosts Node Root Directory default. [More...](#)

Class Path: The classpath (Manager) to [Info...](#)

Arguments: The argument server. [More...](#)

```
-Xms2048m -Xmx9216m -
-Djavax.xml.parsers.SAXParserFactory=com.sun.org.apache.xerces.internal.jaxp.SAXParserFactoryImpl -
-Doracle.odi.agent.startup.clustertimeoutseconds=300 -Xms2048m -Xmx6144m -
-Doracle.odi.coherence.wka1=
-Dtangosol.coherence.localhost=
-Dtangosol.coherence.localport=29066 -Doracle.odi.coherence.wka1.port=29066 -Dserver.group=bia_odi
```

7. Click **Activate Changes**.
8. Re-start both BI server and ODI server.

Upgrade Oracle Business Intelligence Content to Oracle Analytics Server

Upgrade the Oracle Business Intelligence content to Oracle Analytics Server.

Topics:

- [Upgrade Repository](#)
- [Upgrade Catalog](#)
- [Upgrade the JAZN File](#)

Upgrade Repository

Merge the Oracle BI Applications 11.1.1.10.3 PS4 repository content and the Oracle BI Applications 11.1.1.10.3 custom content.

1. Get the Oracle BI Applications 11.1.1.10.3 PS4 baseline repository.
 - a. Get the Oracle BI Applications 11.1.1.10.3 PS4 baseline BAR file from `<NEW_ORACLE_HOME>/bi/biapps/admin/provisioning/OracleBIPresentationServicesComponent/OracleBIApps.bar`.
 - b. Extract the repository from the BAR file using the `expandarchive.sh` command.

- i. Navigate to `<NEW_ORACLE_HOME>\bi\modules\oracle.bi.metadatalcm\scripts` directory.
- ii. Run the command: `expandarchive.sh <BAR file path> <path to target folder> encryptionpassword=<password>`
For Example: `./expandarchive.sh <NEW_ORACLE_HOME>/bi/biapps/admin/provisioning/OracleBIPresentationServicesComponent/OracleBIApps.bar /u01/backup/ encryptionpassword=Admin123`
 In the target folder path you provided in the `expandarchive` command, you can find the baseline repository under `<path to target folder>/datamodel/rpd/default.rpd`



Note:

Set the `DOMAIN_HOME` variable to run the `expandarchive.sh` command.

2. Apply a repository patch.
 - a. Go to `<DOMAIN_HOME>/bitools/bin`.
 - b. Run the command to apply the custom repository patch generated during the pre-upgrade to the Oracle BI Applications 11.1.1.10.3 PS4 repository file: `./patchrpd.sh -C <10.3 PS4 RPD> -G <10.3 RPD> -I <Custom Patch file> -O Merged.rpd -V decision.csv -U -N -8 -A -S patchpassword`
For example, `./patchrpd.sh -C BIAPPS103PS4_Baseline.rpd -G BIAPPS103_Baseline.rpd -I patch.xml -O Merged.rpd -V decision.csv -U -N -8 -A -S Admin123`
 Provide passwords when prompted.
 U is an optional argument that applies default decisions for conflicts automatically so that `patchrpd` can finish successfully. If you don't include this parameter, then `patchrpd` displays a warning and exits if a conflict is detected.
 N is an optional argument that is used to ignore all non-fatal errors. Examples of non-fatal errors are unresolved objects, duplicated objects, and broken or incorrect expressions. 8 specifies the UTF-8 encoding.
 A is an optional argument used to skip the subset patching and instead apply the patch using input repository files.
 This example applies `patch.xml` to the Oracle BI Applications 11.1.1.10.3 PS3 repository, and then generates `Merged.rpd` output repository and `decision.csv` output decision file. The `Merged.rpd` repository file is the upgraded repository file that has the Oracle BI Applications 11.1.1.10.3 PS3 content and customizations.
3. Upload the `Merged.rpd` repository file to Oracle BI Applications 11.1.1.10.3 PS4.
 - a. Go to `<DOMAIN_HOME>/bitools/bin`.
 - b. Run the command: `./datamodel.sh uploadrpd -I <Merged Rpd> -SI <service instance> -U <username> -P <password>`
4. Download the repository file from Oracle BI Applications 11.1.1.10.3 PS4.
 - a. Go to `<DOMAIN_HOME>/bitools/bin`.

- b. Run the command: `./datamodel.sh downloadrpd -O /u01/BIAPPS103PS4Upgraded.rpd -SI biainstance -U <username> -P <password>`
5. Use the Oracle Analytics Client Tool to open the downloaded repository file and verify that the custom changes are present.

Download the Oracle Analytics Client Tool for Windows from [Download page for Oracle Analytics Client Tools](#).

Upgrade Catalog

Migrate the Catalog customizations from Oracle BI Applications 11.1.1.10.3 to Oracle BI Applications 11.1.1.10.3 PS4.

1. Import the catalog from the Oracle BI Applications 11.1.1.10.4 baseline bar into the upgraded environment using the `importarchive` command. The Oracle BI Applications 11.1.1.10.4 baseline BAR file is available in `NEW_ORACLE_HOME/bi/biapps/admin/provisioning/OracleBIPresentationServicesComponent/OracleBIApps.bar`.
 - a. Navigate to `<DOMAIN_HOME>/bitools/bin`.
 - b. Run the command:


```
./importarchive.sh <Service_instance> <Oracle BI Applications 11.1.1.10.4 baseline BAR> encryptionpassword=<password> nodatamodel noauthorization
```

For example, `./importarchive.sh biainstance OracleBIApps.bar encryptionpassword=Admin123 nodatamodel noauthorization`
2. Migrate the Catalog customizations from Oracle BI Applications 11.1.1.10.3 to Oracle BI Applications 11.1.1.10.3 PS4.
 - a. Log in to the Analytics page of the upgraded environment.
 - b. Navigate to Catalog and select Shared Folders.
 - c. Unarchive the Oracle BI Applications 11.1.1.10.3 custom content you backed up during the pre-upgrade stage.

Click **Unarchive**, select the archive file, set **Replace** to **All** and **ACL** to **Preserve**, and then click **OK**.
3. On the Analytics page, navigate to the Catalog and verify that the custom content is available.

Upgrade the JAZN File

The in-place upgrade process moves the JAZN content from Oracle BI Applications 11.1.1.10.3 to Oracle BI Applications 11.1.1.10.3 PS4.

Use Enterprise Manager, verify if the **DVContentAuthor** and **DVConsumer** application roles are present. If these roles aren't present, then perform the following steps to add the **DVContentAuthor** and **DVConsumer** application roles and assign the Oracle Analytics Server permission sets to the Oracle BI Applications application roles.

1. Log in to Enterprise Manager.
2. Navigate to Weblogic Domain, select **Security**, and then click **Application Roles**.

3. For **Application Stripe**, select **obi**, and then click **Create**.
4. Add the **DVContentAuthor** and **DVConsumer** application roles.
5. Add **BIAuthor** as a member of **DVContentAuthor**, and **BIConsumer** as a member of **DVConsumer**.
6. Go to `<DOMAIN_HOME>/bi/bitools/bin`.
7. Run the script to assign permission sets to the DVContentAuthor and DVConsumer application roles.
 - For DVContentAuthor role, run the script: `./grantPermissionSetsToBIRole.sh -r DVContentAuthor -p va.author`
 - For DVConsumer role, run the script: `./grantPermissionSetsToBIRole.sh -r DVConsumer -p va.interactor`

If you want to fine-tune permission assignments, see the description in the Grant or Revoke Permission Assignments topic in *Managing Security for Oracle Analytics Server*.

Upgrade Oracle Data Integrator Repository

Upgrade the existing ODI repository to the latest supported version as mentioned in the Oracle BI Applications Certification Matrix .

In order to retain the existing topology and security configuration in ODI while minimizing the impact on other tools that interact with ODI such as the Oracle BI Applications Configuration Manager (Configuration Manager) and the Oracle BI Applications instance of Oracle WebLogic Server, export the existing or pre-upgrade configurations from the ODI Master Repository, drop the existing pre-upgrade ODI Work and Master Repositories, import the new upgrade ODI Work and Master Repositories into the same schema, and then import the pre-upgrade ODI Repository configurations.

This effectively replaces all content such as mappings, packages, models, knowledge modules, load plans while retaining the configuration definitions.

This process also allows you to retain any customizations performed by exporting the customizations from the pre-upgrade repository and importing them back in after upgrading the repository.

Drop the Existing ODI Repository Schema

Use the Oracle BI Applications repository creation utility (RCU) to drop the existing 11.1.1.10.3 ODI Repository schema.

When you are prompted with a list of schemas installed, select the schema where the ODI repository for 11.1.1.10.3 exists. Only drop the `<prefix>_BIA_ODIREPO` schemas. Don't drop any other schema.

1. Before dropping the existing ODI Repository Schema, stop all services.

Command: `<DOMAIN_HOME>/bi/bitools/bin/stop.sh`

2. Start the repository creation utility (RCU).

```
$ORACLE_HOME/oracle_common/bin/rcu -compInfoXMLLocation $ORACLE_HOME/  
oracle_common/rcu/config/ComponentInfo_biapps.xml -  
storageXMLLocation $ORACLE_HOME/oracle_common/rcu/config/Storage_biapps.xml
```

3. Launch the Oracle BI Applications RCU and select **Drop Repository**.

4. In the Database Connection Details screen, provide the connection details to the database which hosts the ODI Repository for Oracle BI Applications 11.1.1.10.3.
5. From the **Prefix All Schema Owners** list, select the prefix for your Oracle BI Applications 11.1.1.10.3 schemas.
6. In the Select Components screen, select only the **Oracle Data Integration Master and Work Repository**. Don't select any of the other schema components.
7. Click **Drop** to drop the ODI repository schema for 11.1.1.10.3.

Create the ODI Repository

Create the ODI repository for Oracle BI Applications 11.1.1.10.3 PS4.

The steps to create the ODI repository for Oracle BI Applications 11.1.1.10.3 PS4 are the same as installing a fresh ODI repository. The only difference is that you need to only select the option to restore the ODI Master and Work repositories.

Run the Oracle BI Applications 11.1.1.10.3 PS4 RCU to create the schema for the ODI repository. This schema must use the same name as the 11.1.1.10.3 ODI repository schema that you dropped earlier. You must select the option to use an existing prefix and re-use the same prefix that was used by the schema that was previously dropped.

1. If you aren't running RCU on the database host machine, then you must copy the `obia_odi.dmp` file to a directory with global write access on the appropriate database server machine. RCU writes log files to this directory. The `.dmp` file is located in `$NEW_ORACLE_HOME/oracle_common/rcu/integration/biapps/schema`.
2. Launch the Oracle BI Applications RCU for 11.1.1.10.3 PS4

```
$NEW_ORACLE_HOME/oracle_common/bin/rcu -compInfoXMLLocation  
$NEW_ORACLE_HOME/oracle_common/rcu/config/ComponentInfo_biapps.xml  
-storageXMLLocation  
$NEW_ORACLE_HOME/oracle_common/rcu/config/Storage_biapps.xml
```

3. Select **Create Repository**.
4. In the Database Connection Details screen, provide the connection details to the database which previously hosted the ODI repository for Oracle BI Applications 11.1.1.10.3 which you dropped earlier.
5. In the Select Components screen, from the **Select an existing Prefix** list, select the same prefix as that of your ODI repository for Oracle BI Applications 11.1.1.10.3. If you don't see the prefix as an existing prefix, then click **Create a new Prefix**, and enter the same prefix you used for the ODI repository for Oracle BI Applications 11.1.1.10.3.
6. Select **Oracle Data Integration Master and Work Repository**. Don't select any other component.
7. In the Custom Variables page, in the **Value** field, for the `<prefix>_BIA_ODIREPO` schema, enter the directory path of the folder on the database server that contains the `obia_odi.dmp` file.

 **Note:**

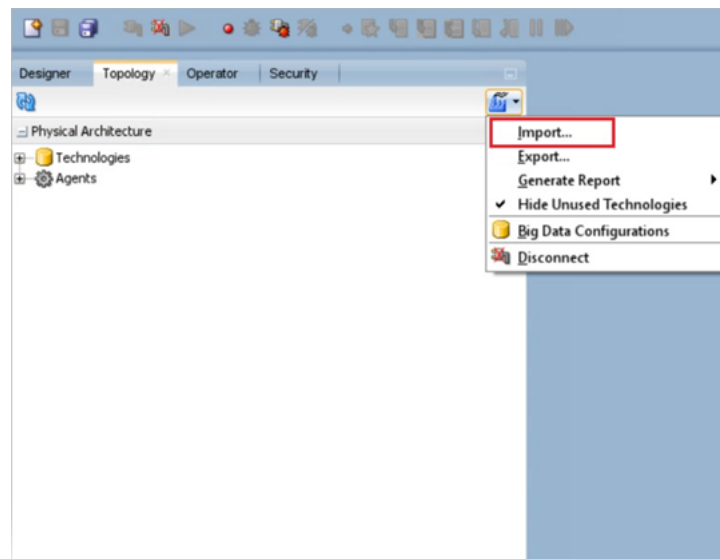
Don't include the name of the .dmp file in the directory path.

8. Complete the ODI repository creation.
9. Start all services.
Command: `<DOMAIN_HOME>/bi/bitools/bin/start.sh`
10. Create a connection in ODI Studio to the ODI repository for Oracle BI Applications 11.1.1.10.3 PS4 which you created in the previous step. The repository is set to Internal Authentication.
11. Log in to Master repository as SUPERVISOR user and update the Work Repository connection details.

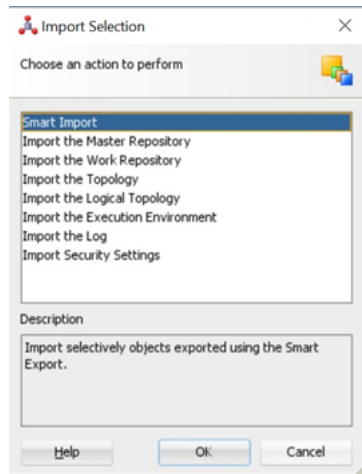
Import Content Into the ODI Repository

Import content into the ODI repository of Oracle BI Applications 11.1.1.10.3 PS4.

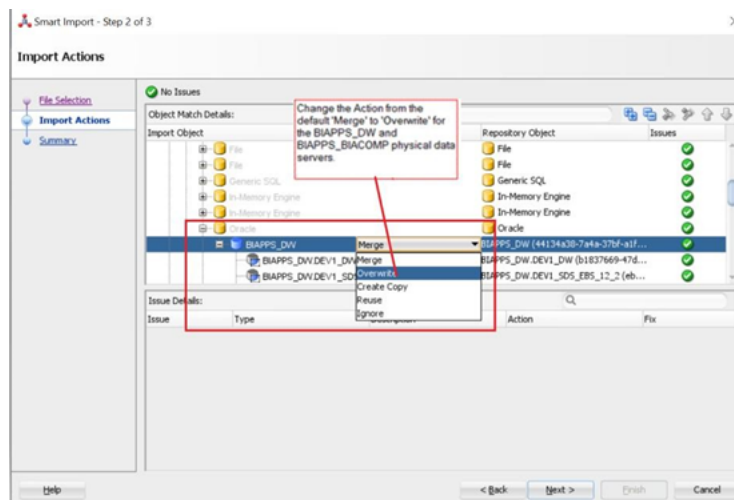
1. Import connection details.
 - a. Launch the ODI Studio client and connect to the ODI repository of Oracle BI Applications 11.1.1.10.3 PS4.
 - b. In the Topology tab, from the **Connect Navigator** drop-down on the top right corner, select **Import**.



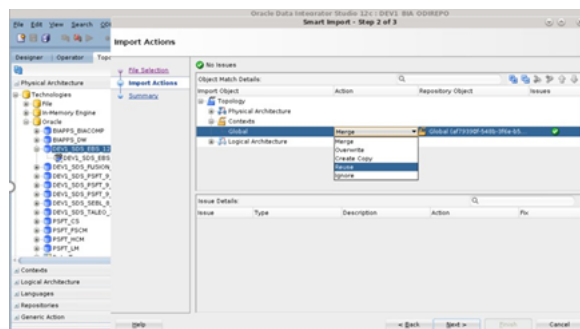
- c. In the Import Selection dialog, select **Smart Import**.



- d. In the File Selection dialog, specify the export file created while exporting connections.
- e. The default behavior of Smart Import is to merge details in the target repository. Ensure that no issues are reported. If issues are reported, then resolve them to ensure that the existing details are replaced by the details being imported. Select the **BIAPPS_DW** and **BIAPPS_BIACOMP** Data Servers, and then select the **Overwrite** option.

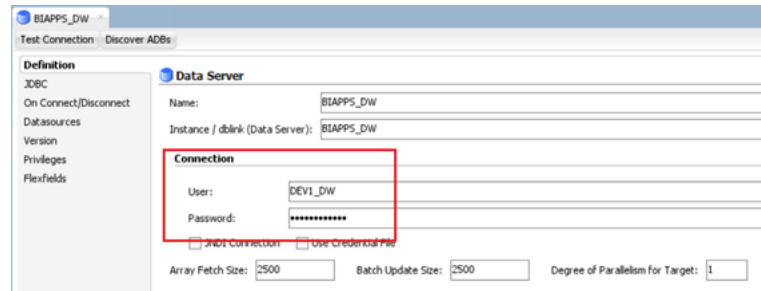


- f. Select Global context, select the **Reuse** option, and then click **Next**.



2. Verify that the physical servers have the correct details and the physical schemas have the correct Datasource Num ID value set in the DATASOURCE_NUM_ID flexfield.

- a. In ODI Studio, in the Topology tab, select **Physical Architecture** and open the BIAPPS_DW physical server.
- b. In the Definition tab, verify the user and password are correctly populated.



- c. In the JDBC tab, verify that the JDBC URL is correctly set. If you used the default Merge action during the Smart Import, then the user and password will be updated but the JDBC URL will remain unchanged.



- d. Repeat step 2 and its substeps for the BIAPPS_BIACOMP physical server.
- e. Verify that the physical schema for BIACOMP and DW are set as defaults using these instructions. If they are not set as defaults, then the Load Plans will fail.
 - i. In ODI Studio, click **Topology** and select **Physical Architecture**.
 - ii. Open the physical schema under the BIAPPS_BIACOMP physical server.
 - iii. Verify that the **Default** option is selected on the Definition tab and save the changes.
 - iv. Repeat steps ii and iii for the physical schema under the BIAPPS_DW physical server.

- f. Verify the source connection details.

For example, if you need to extract from an instance of eBusiness Suite 12.2.0, then open the corresponding physical server (EBS_SRC) and verify the User/Password and the JDBC.

The physical server name is the one that you specified in the Configuration Manager user interface when you registered the source.

- g. Verify the associated physical schema. Navigate to the Flexfields tab and verify that the **DATASOURCE_NUM_ID** flexfield is set to the value you originally assigned. This value of **DATASOURCE_NUM_ID** must match the value in Configuration Manager for this source connection.
- h. Open the corresponding logical schema and verify that the **DATASOURCE_NUM_ID** flexfield is also set with the same value.
- i. Verify that the following logical schemas have the correct Data Source Num ID value set in the **DATASOURCE_NUM_ID** flexfield:
 - If you don't see 999 values for all these logical schemas, set the value to 999.
 - DW_BIAPPS11G
 - DW_BIAPPS11G_LOG_FILES

- DW_BIAPPS11G_SHARED_FILES
- DW_BIAPPS11G_SRCFILES
- Navigate to the Flexfields tab and verify that the DATASOURCE_NUM_ID flexfield is set to the value you originally assigned. The value of DATASOURCE_NUM_ID must match the value in Configuration Manager for this source connection. Verify the value of DATASOURCE_NUM_ID in all the registered file technology data servers.
 - DS_TALE015A_SRCFILES
- j. Ensure that all the registered file technology data servers have the following property in their JDBC url:


```
NO_RTRIM_DEL_STRING=true
```

 If not, then add this property to the end of the JDBC url as shown below:


```
jdbc:snps:dbfile?ENCODING=UTF-8&NO_RTRIM_DEL_STRING=true
```
- k. If the registered file technology data servers falls under the old ORACLE_HOME, update it to use the NEW_ORACLE_HOME. Repeat this task for all applicable technology data servers.
- l. Update OracleDI Agent with host name.
- 3. Import the Security settings that you exported while exporting security settings. Import the Security settings using the **Insert** and **Update** options as follows:
 - a. Import new security objects as follows:
 - i. In the Topology tab, from the **Connect Navigator** (Topology icon drop-down on the top right side of the navigator pane), select **Import**.
 - ii. In the Import Selection dialog, select **Import Security Settings**.
 - iii. In the Import Security Settings dialog, select **Synonym Mode INSERT** for the Import Mode, select **Import from a Folder**, enter the directory location to which you had exported the Security settings while exporting security, and then click **OK**.
 - b. Update the existing security objects as follows:
 - i. In the Topology tab, from the **Connect Navigator** (Topology icon drop-down on the top right side of the navigator pane), select **Import**.
 - ii. In the Import Selection dialog, select **Import Security Settings**.
 - iii. In the Import Security Settings dialog, select **Synonym Mode UPDATE** for the update Mode, select **Import from a Folder**, enter the directory location to which you had exported the Security settings while exporting security settings, and then click **OK**.

Reconfigure the ODI Repository For External Authentication

If you want to log in to the ODI repository as administrator, configure the ODI repository for Oracle BI Applications 11.1.1.10.3 PS4 for external authentication.

1. Start the Oracle Analytics Server instance, Administration Servers, Managed Servers, and the Node Manager.
See [Start Servers and Processes](#).

2. Run the following commands to copy and update files.

```
cp $DOMAIN_HOME/odi-client-config/embedded/
cwallet.sso $NEW_ORACLE_HOME/odi/studio/bin
cp $DOMAIN_HOME/odi-client-config/embedded/jps-config-
jse.xml $NEW_ORACLE_HOME/odi/studio/bin
cp $DOMAIN_HOME/config/fmwconfig/system-jazn-
data.xml $NEW_ORACLE_HOME/odi/studio/bin
```

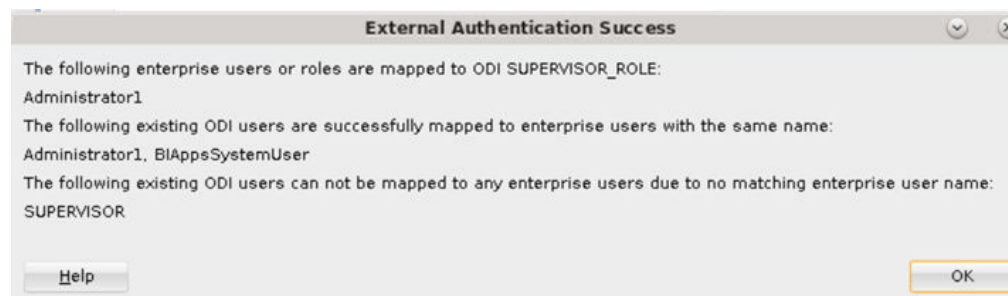
update odi.conf to use ./jps-config-jse.xml

3. Launch the ODI Studio client and connect to the ODI repository of Oracle BI Applications 11.1.1.10.3 PS4 using externally authenticated users (for example, Administrator1).

In case the external authentication isn't enabled by default, follow these steps to enable the external authentication and connect to ODI Studio using external user.

- a. Select the **ODI** menu, and then select **Disconnect Login Name** to disconnect from the ODI repository.
- b. From the **ODI** menu, select **Switch Authentication Mode**.
- c. Enter the database connection details on the Login screen, and then click **Next**.
- d. On the Credentials screen, click **Add**, click **Retrieve Enterprise Roles & Users**, select **Administrator1**, and then click **OK**.

The external authentication success dialog lists the users or roles mapped to the administrative role. You'll see at least two users are matched. Note that the SUPERVISOR user defined in ODI will not be matched to anything in the security store.



You can now connect to ODI using externally authenticated users; for example, the Oracle BI Applications Administrator user.

If you receive the following error when you try to switch to external authentication, you haven't configured the security files required for external authentication on the instance of ODI Studio you are using.



4. If required, create a connection in ODI Studio to the ODI repository for 11.1.1.10.3 PS4. The repository is set to external authentication. Use the credentials of the Oracle BI Applications Administrator user to connect to the repository.
5. Disable access for the SUPERVISOR user.

Note that when you switch from ODI internal to Oracle Fusion Middleware security, make sure that the ODI users have no expiry dates (including SUPERVISOR). If users have expiry dates, then change the expiry dates, and ensure that none of the users were disabled, after the security import.

Extract ETL Archive

Extract the archived ETL files from the `NEW_ORACLE_HOME/bi/biapps/etl/biapps_etl.zip` file.

- On Linux operating systems, enter the following commands to change directory to the scripts folder and then run the WLST command to extract the ETL files:

```
cd NEW_ORACLE_HOME/bi/biapps/scripts
NEW_ORACLE_HOME/oracle_common/common/bin/wlst.sh extract_etl.py
```

- On Windows operating systems, enter the following commands to change directory to the scripts folder and then run the WLST command to extract the ETL files:

```
cd NEW_ORACLE_HOME/bi/biapps/scripts
NEW_ORACLE_HOME/oracle_common/common/bin/wlst.cmd extract_etl.py
```

Regenerate Load Plans

Load Plans that were originally generated in the ODI Repository for 11.1.1.10.3 don't exist in the ODI Repository for 11.1.1.10.3 PS4.

The steps to transfer content from the 11.1.1.10.3 repository to the 11.1.1.10.3 PS4 repository don't include transferring the original load plans. The load plans will not reflect any changes introduced as part of the upgrade, hence you need to generate a new load plan.

Configuration Manager retains the load plan definitions on upgrade even though any metadata associated with this load plan that was stored in ODI is no longer available. Use these existing definitions in Configuration Manager to regenerate load plans including Domains Only Load Plans. Note that any tasks that had previously executed pre-upgrade will execute in incremental mode post-upgrade while any new tasks that may be introduced in the generated load plan will initially execute in full mode.

1. Log in to Configuration Manager as the Oracle BI Applications Administrator user.
2. Navigate to **Manage Load Plans**.
3. Regenerate all load plans including the Domains-Only load plans.

Import and Apply ETL Customizations

After you upgrade the data warehouse table definitions and data, you need to import the customizations into the post-upgrade repository.

For separate ODI repositories — Development (DEV), Testing (TEST), Production (PROD), you need to perform different steps to get the customizations into the post-upgrade DEV, TEST, or PROD repository. Assuming that only DEV is open to developers to make changes and TEST and PROD instances are locked down so content can only be migrated, the following summarizes the differences. Refer to the respective documents for the exact implementation of each step.

ODI Repository	Steps to Import Customizations
DEV	Customizations Imported using Regular Export/Import Pre-Upgrade Dev Repo <ul style="list-style-type: none"> • Export Custom Folders • Export Custom Datastores Post-Upgrade Dev Repo <ul style="list-style-type: none"> • Version Model • Version Model again • Import Custom Datastores • Import Custom Folders • Reapply Customizations • Generate Custom Scenarios • Apply Customizations to Generated Load Plan
DEV to TEST/ PROD	Customizations Migrated using Smart Export/Import Post-Upgrade Dev Repo <ul style="list-style-type: none"> • Smart Export of Custom Folders Test/Prod Repo <ul style="list-style-type: none"> • Smart Import of Custom Folders

The following sections describe the process to import the customizations previously exported from the pre-upgrade repository into the post-upgrade DEV repository. To migrate the customizations from the DEV repository to TEST and PROD repositories, see My Oracle Support document (ID 2688437.1) titled *OBIA 12c: How do you migrate configurations and/or customizations from Development to a Test or a Production Environment*.

An important difference in the two processes is the use of Regular and Smart import. Smart import's default behavior is to overwrite the target while Regular import allows us to merge with the target. Smart import brings a lot of extra objects while Regular import just brings the objects you specified.

When moving from pre-upgrade to post-upgrade, you want to move only the customized objects. Using Smart import would bring almost all objects from the pre-upgrade repository and by default overwrite the objects in the post-upgrade repository. As the post-upgrade repository includes bug fixes and enhanced functionality, you would lose all of that and replace it with the legacy pre-upgrade objects. Regular import does not bring these extra objects with it.

When moving from DEV to TEST, the objects in the DEV repository should be replacing the objects in TEST as they represent the bug fixes and enhanced functionality. For migrating, use Smart Import to bring all objects as these objects should always take precedence and overwrite what is in the target.

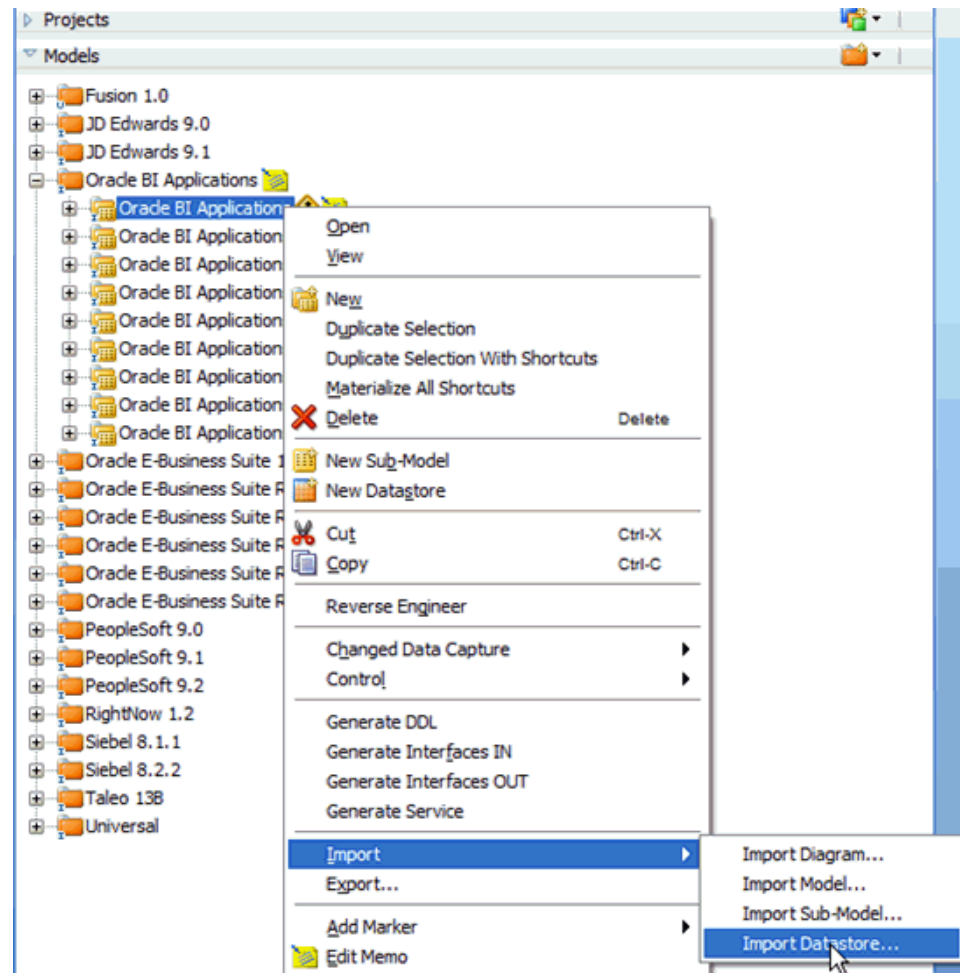
Import Datastores

You must import the datastores prior to importing the customized ETL tasks.

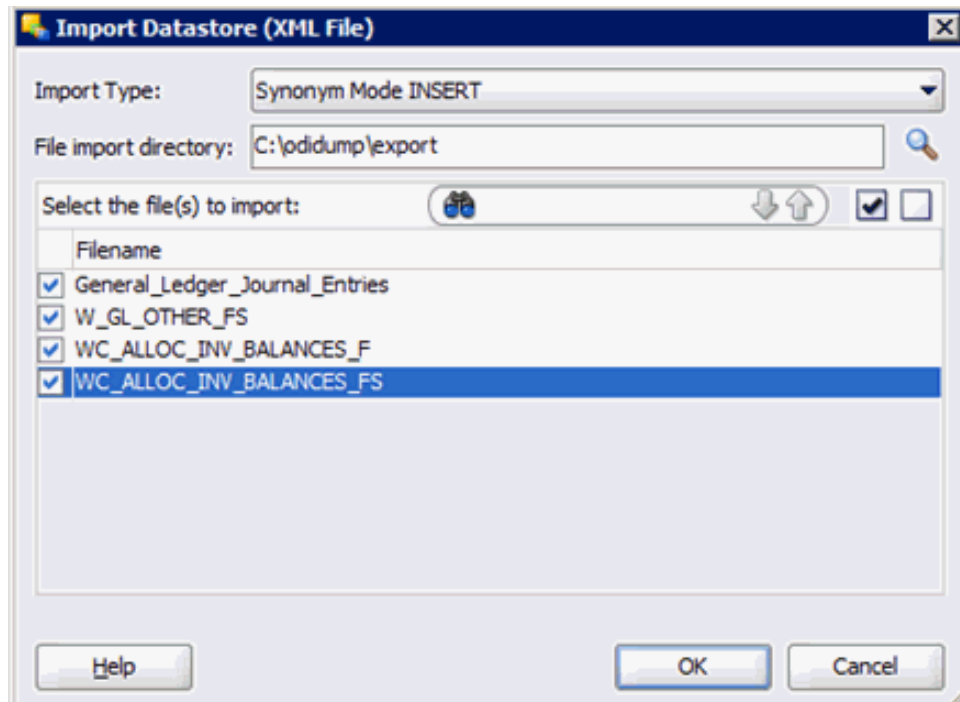
Note:

The following steps are implemented in the DEV repository only. To migrate changes to TEST and PROD repositories, see My Oracle Support document (ID 2688437.1) titled *OBIA 12c: How do you migrate configurations and/or customizations from Development to a Test or a Production Environment*.

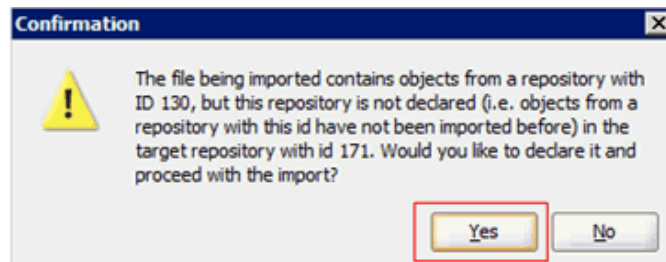
1. Launch the ODI Studio client and connect to the ODI Repository for Oracle BI Applications 11.1.1.10.3 PS4.
2. Click **Designer**, click **Models**, click **Oracle BI Applications** (folder), and select **Oracle BI Applications (Model)**.
3. Create original and custom versions of the model.
 - a. Right-click the model, select **Version** and then select **Create Version**. Create an initial version.
 - b. Perform these steps again to create the version with customizations.The original version reflects the ready-to-use datastores while the new version reflects the merged datastores, allowing comparison between the two.
4. Import the customized datastores.
 - a. Right-click the **Oracle BI Applications model**.
 - b. Select the **Import** and the **Import Datastore** option.



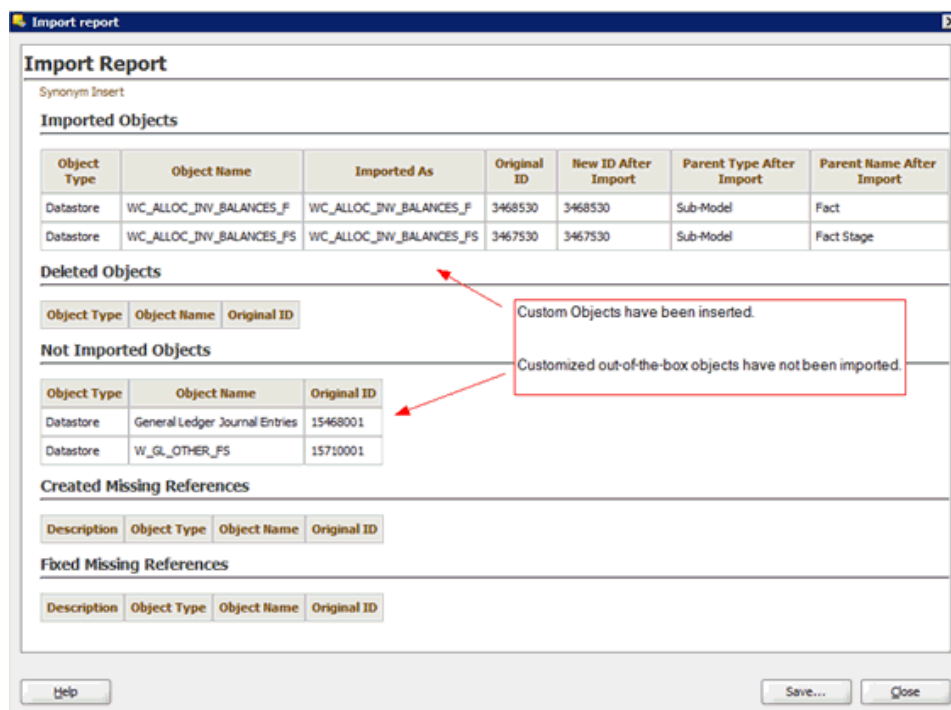
- c. In the Import Datasource window, ensure that **Import Type** is **Synonym Mode INSERT**. The Update mode will update existing columns to reflect their pre-upgrade state while Insert/Update mode will delete columns that were introduced in the upgrade repository but do not exist in the pre-upgrade repository.
- d. Navigate to the directory where you previously exported the custom datasources.
- e. Select the check boxes for each datasource to be imported and click **OK**.



If prompted to declare the repository ID and continue with the import, select **Yes**. You may see this prompt multiple times, click **Yes** each time.



When the import completes, you should see a summary report similar to the following.



The upgrade datastores will now be merged with the pre-upgrade customizations.

- f. Review the customized ready-to-use datastores that have been imported by navigating to the Columns tab.

130	BUDGET_WID	NUMBER	10
131	BALANCE_TYPE_WID	NUMBER	10
132	FINANCIAL_GL_FLG	VARCHAR2	1
133	BUDGETARY_CONTROL_FLG	VARCHAR2	1
134	JOURNAL_CATEGORY	VARCHAR2	1
135	RECON_FLG	VARCHAR2	1
136	BUDGET_LEDGER_WID	NUMBER	10
137	BUDGET_MCAL_CAL_WID	NUMBER	10
138	BUDGET_PERIOD_WID	NUMBER	10
139	BUDGET_TRANS_TYPE_INDICATOR	VARCHAR2	80
139	JOURNAL_SOURCE_WID	NUMBER	10
140	X_BATCH_DESCRIPTION	VARCHAR2	240
141	JOURNAL_HEADER_DESCR	VARCHAR2	240
141	X_USER_JE_CATEGORY_NAME	VARCHAR2	25
142	JOURNAL_LINE_DESCR	VARCHAR2	240
142	X_JE_EXTERNAL_REFERENCE	VARCHAR2	80
143	X_JE_LINE_DESCRIPTION	VARCHAR2	240
143	ACCT_PERIOD_END_DT_KEY	NUMBER	10
144	X_USER_JE_SOURCE	VARCHAR2	25

A red box highlights the message: "Merged columns share the same position number after the merge." Another red box highlights the rows for columns 139 through 144.

In INSERT mode, the custom columns are imported into the datastore. In the 11.1.1.10.3 repository, these are usually the last columns. In the 11.1.1.10.3 repository, Oracle may have added columns and these will have a conflicting position ID, or a column simply may have moved between 11.1.1.10.3 and 11.1.1.10.3 PS4. These columns will appear to have the same position number but this does not cause any issues. As an optional step, you can have ODI recalculate the position numbers.

- g. Double-click on any column in the datastore. Without making any changes, now select another column. ODI will automatically recalculate the position numbers. Save the datastore.

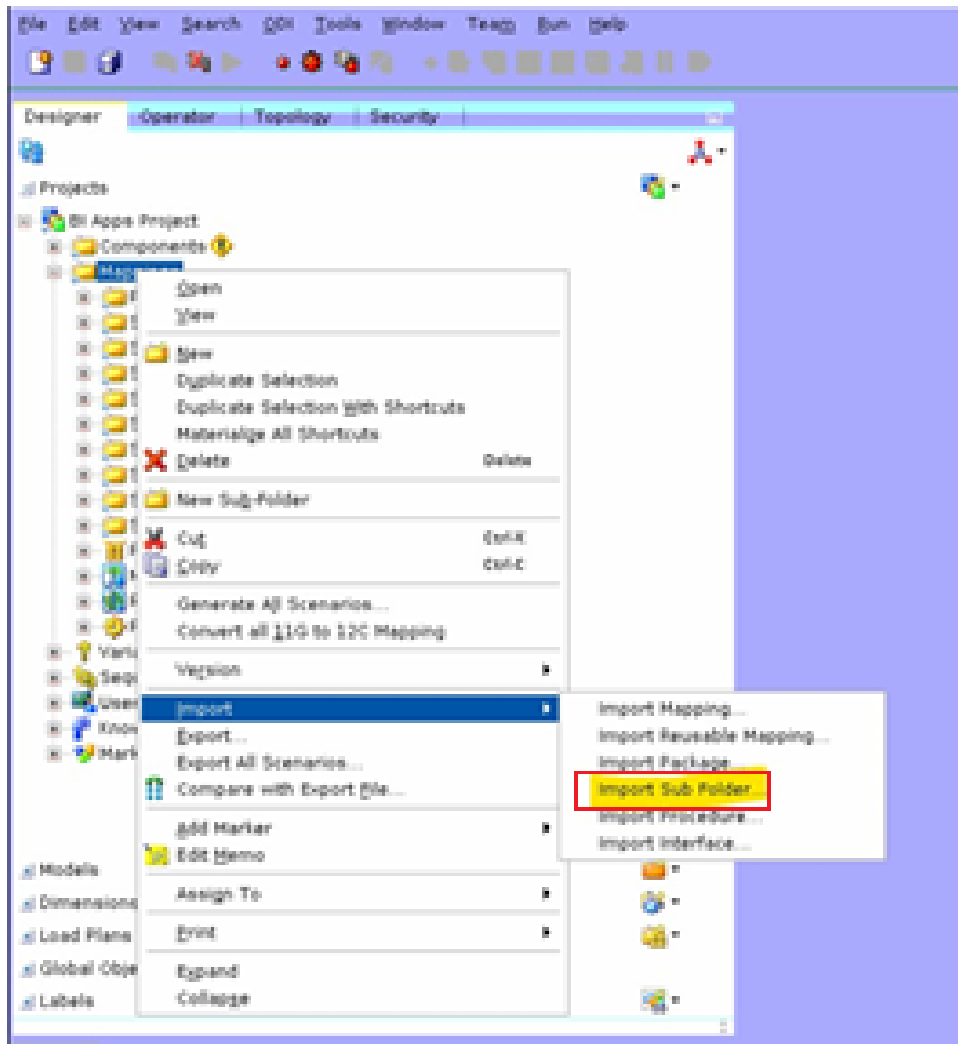
130	BUDGET_WID	NUMBER	10
131	BALANCE_TYPE_WID		10
132	FINANCIAL_GL_FLG		1
133	BUDGETARY_CONTROL_F		1
134	JOURNAL_CATEGORY		30
135	RECON_FLG	CHAR	1
136	BUDGET_LEDGER_WID	NUMBER	10
137	BUDGET_MCAL_CAL_WID	NUMBER	10
138	BUDGET_PERIOD_WID	NUMBER	15
139	BUDGET_TRANS_TYPE_INDICATOR	VARCHAR2	80
140	JOURNAL_SOURCE_WID	NUMBER	10
141	X_BATCH_DESCRIPTION	VARCHAR2	240
142	JOURNAL_HEADER_DESCR	VARCHAR2	240
143	X_USER_JE_CATEGORY_NAME	VARCHAR2	25
144	JOURNAL_LINE_DESCR	VARCHAR2	240
145	X_JE_EXTERNAL_REFERENCE	VARCHAR2	80
146	X_JE_LINE_DESCRIPTION	VARCHAR2	240
147	ACCT_PERIOD_END_DT_KEY	NUMBER	10
148	X_USER_JE_SOURCE	VARCHAR2	25

Step off the column and ODI rennumbers the columns to use consecutive position numbers.

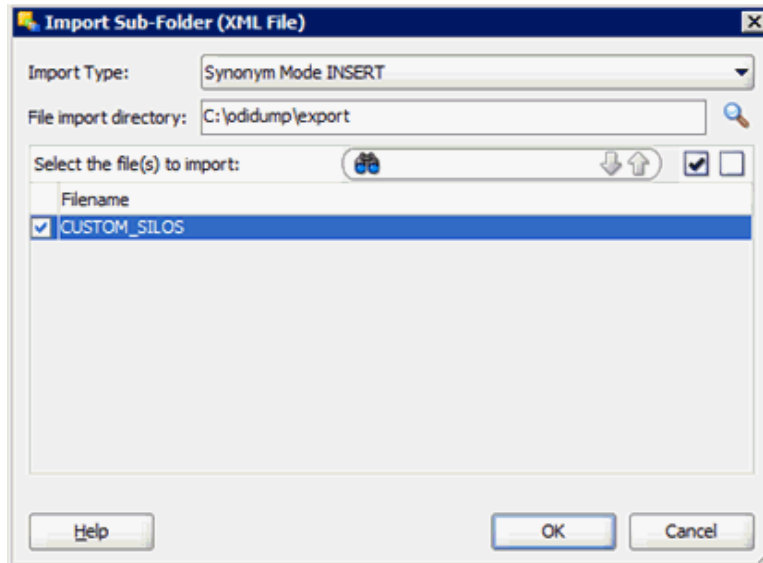
Import Customized ETL Tasks

Use these instructions to import the customized ETL tasks.

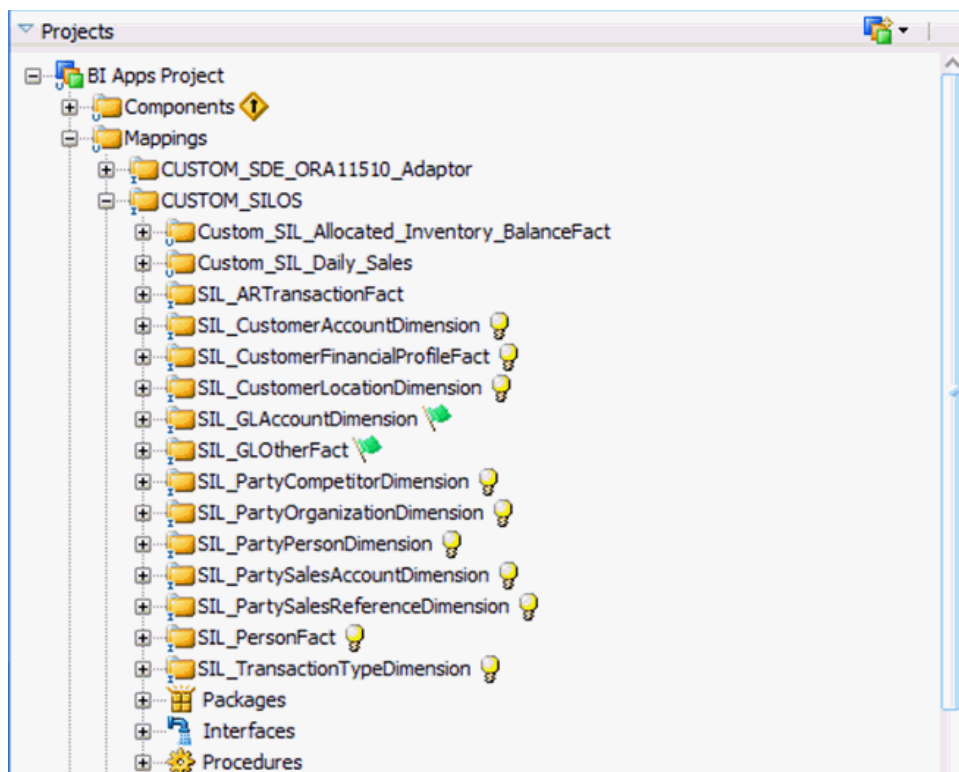
1. Launch the ODI Studio client and connect to the ODI Repository for Oracle BI Applications 11.1.1.10.3 PS4.
2. Click **Designer**, click **Projects**, click **BI Apps Project**, and select **Mappings**.
3. Right-click **Mappings** and select **Import...** and then **Import Sub Folder...**



4. In the Import Sub-Folder window, ensure **Import Type** is **Synonym Mode INSERT**.
5. Navigate to the directory where you previously exported the custom folders.
6. Select the check boxes for each folder to be imported and click **OK**.



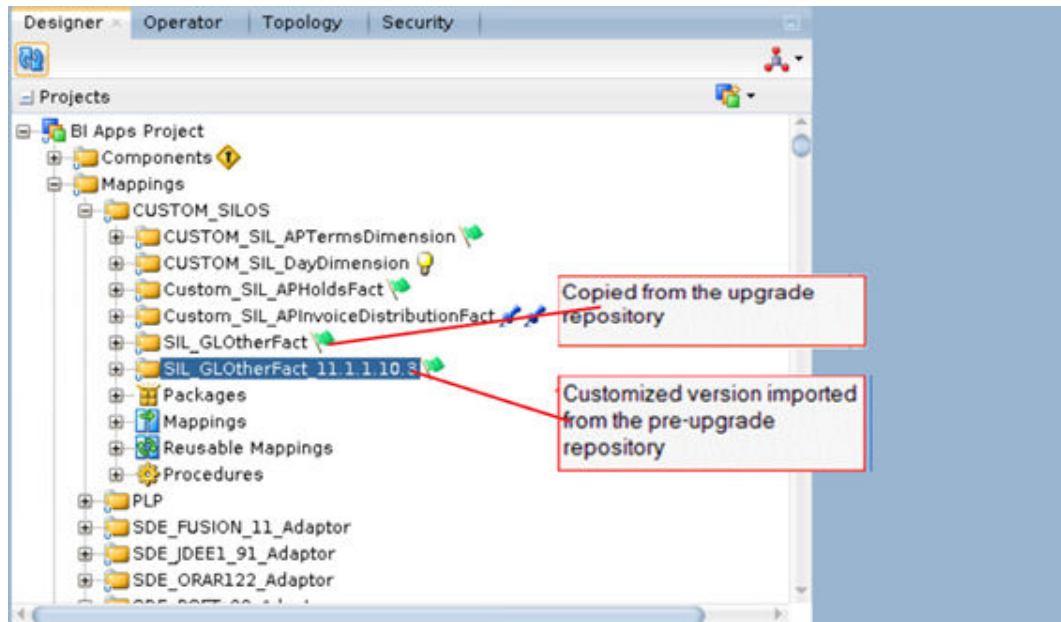
When the import completes, you can see your custom folder and its corresponding customized objects.



Merge any customizations with any changes that may have been introduced in the upgrade repository. For example, a column may have been added to a table that was customized (as in the `W_GL_OTHER_F` example earlier) or bug fixes applied or content otherwise changed by Oracle.

There is no automatic merge mechanism available. The customized ETL tasks must be inspected for changes and the changes manually incorporated into the other. The recommended approach is to re-copy the ETL task and re-apply the customizations to this new copy. Because you are familiar with the changes you have made, it is easier to incorporate these into the new copy rather than figure out the changes Oracle made and incorporate those into your original copy.

7. Rename the customized ETL task to reflect the pre-upgrade version it was based on.
8. Duplicate the ETL task per the customization methodology and move the task to the **Custom** folder.



9. Inspect the customized ETL task. The custom columns are populated but any new columns introduced by Oracle are not.

Below is an example of a customized interface. Make a note of the customizations made.

SIL_GLOtherFact.W_GL_OTHER_F x SIL_GLOtherFact.W_GL_OTHER_F x

Select Dataset: Default

Sources

Lookups

Joins

Filters

Mappings

Target Datastore: General Ledger Journal Entries

Indicator	UK	CN	Target Column Name	Data Type	Length	Scale	Mapping Expression	Exe
1			GL_SEGMENTS_WID	NUMBER	10	0	COALESCE(LKP_W_GL_SEGMENT_D8.SCD1_WID,0)	Sou
1			GL_SEGMENT9_WID	NUMBER	10	0	COALESCE(LKP_W_GL_SEGMENT_D9.SCD1_WID,0)	Sou
1			GL_SEGMENT10_WID	NUMBER	10	0	COALESCE(LKP_W_GL_SEGMENT_D10.SCD1_WID,0)	Sou
1			SEG_PROJECT_WID	NUMBER	10	0	COALESCE(LKP_W_GL_SEGMENT_D_PROJECT.SCD1...	Sou
1			SEG_PROGRAM_WID	NUMBER	10	0	COALESCE(LKP_W_GL_SEGMENT_D_PROGRAM.SCD1...	Sou
1			BUDGET_WID	NUMBER	10	0	COALESCE(SQ_W_GL_OTHER_FS.BUDGET_WID,0)	Sou
1			BALANCE_TYPE_WID	NUMBER	10	0	COALESCE(SQ_W_GL_OTHER_FS.BALANCE_TYPE...	Sou
1			FINANCIAL_GL_FLG	VARCHAR2	1	0	SQ_W_GL_OTHER_FS.FINANCIAL_GL_FLG	Sou
1			BUDGETARY_CONTROL_FLG	VARCHAR2	1	0	SQ_W_GL_OTHER_FS.BUDGETARY_CONTROL_FLG	Sou
1			JOURNAL_CATEGORY	VARCHAR2	30	0	SQ_W_GL_OTHER_FS.JOURNAL_CATEGORY	Sou
1			RECON_FLG	CHAR	1	0	SQ_W_GL_OTHER_FS.RECON_FLG	Sou
1			BUDGET_LEDGER_WID	NUMBER	10	0	COALESCE(SQ_W_GL_OTHER_FS.BUDGET_LEDGER...	Sou
1			BUDGET_MCAL_CAL_WID	NUMBER	10	0	COALESCE(SQ_W_GL_OTHER_FS.BUDGET_MCAL_C...	Sou
1			BUDGET_PERIOD_WID	NUMBER	15	0	COALESCE(SQ_W_GL_OTHER_FS.BUDGET_PERIOD...	Sou
1			JOURNAL_SOURCE_WID	NUMBER	10	0		
1			BUDGET_TRANS_TYPE_INDICATOR	VARCHAR2	80	0	SQ_W_GL_OTHER_FS.BUDGET_TRANS_TYPE_INDIC...	Sou
1			X_BATCH_DESCRIPTION	VARCHAR2	240	0	SQ_W_GL_OTHER_FS.X_BATCH_DESCRIPTION	Sou
1			JOURNAL_HEADER_DESCR	VARCHAR2	240	0		
1			JOURNAL_LINE_DESCR	VARCHAR2	240	0		
1			ACCT_PERIOD_END_DT_KEY	NUMBER	10	0		
1			X_USER_JE_CATEGORY_NAME	VARCHAR2	25	0	SQ_W_GL_OTHER_FS.X_USER_JE_CATEGORY_NAME	Sou
1			EXCHANGE_DT	DATE	7	0		
1			X_JE_EXTERNAL_REFERENCE	VARCHAR2	80	0	SQ_W_GL_OTHER_FS.X_JE_EXTERNAL_REFERENCE	Sou
1			X_JE_LINE_DESCRIPTION	VARCHAR2	240	0	SQ_W_GL_OTHER_FS.X_JE_LINE_DESCRIPTION	Sou
1			X_USER_JE_SOURCE	VARCHAR2	25	0	SQ_W_GL_OTHER_FS.X_USER_JE_SOURCE	Sou

Below is the copied interface where the new columns introduced by Oracle are populated but the custom columns are not.

10. Apply the customizations noted previously in this interface.

Select Dataset: Default

Sources

Lookups

Joins

Filters

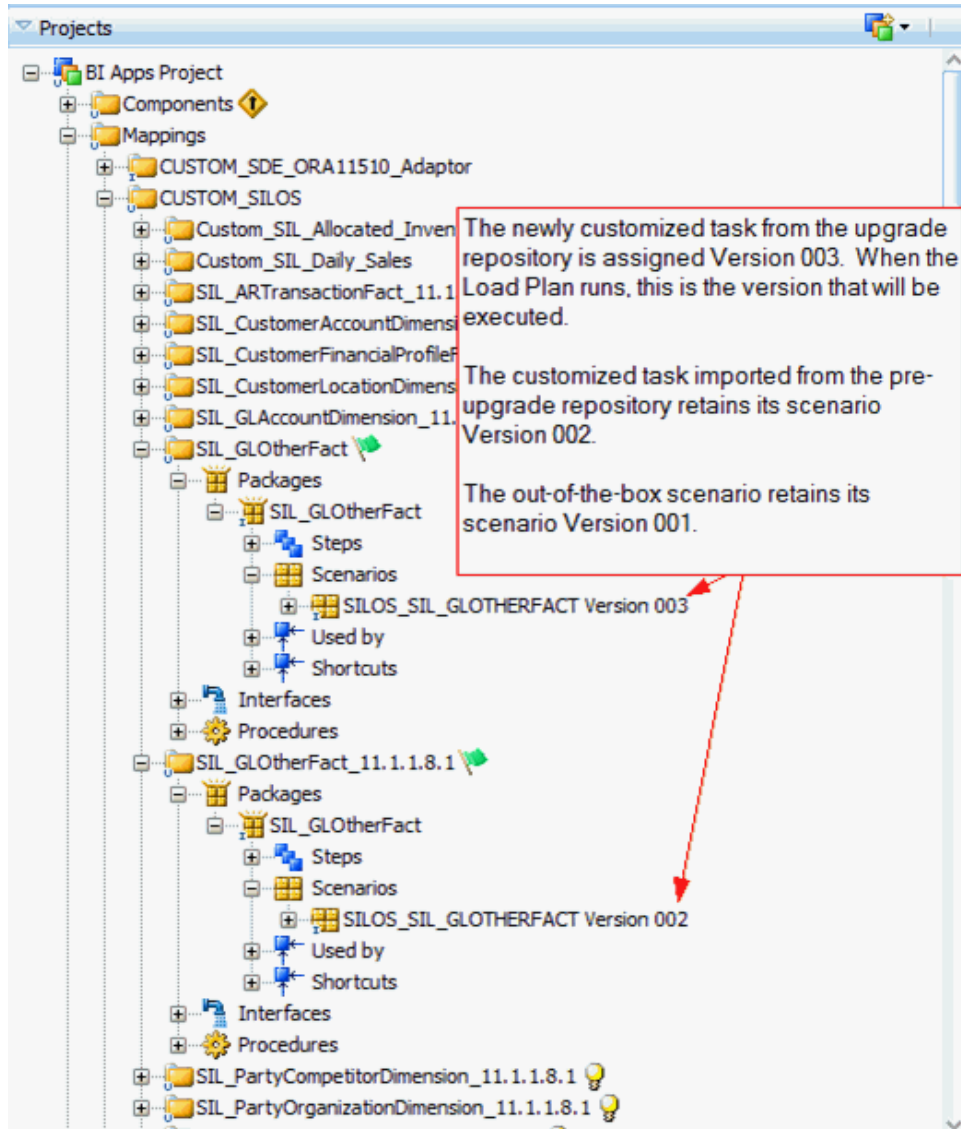
Mappings

Target Datastore: General Ledger Journal Entries

Indicator	UK	CN	Target Column Name	Data Type	Length	Scale	Mapping Expression	Ext
	<input type="checkbox"/>	<input type="checkbox"/>	GL_SEGMENT8_WID	NUMBER	10	0	COALESCE(LKP_W_GL_SEGMENT_D8.SCD1_WID,0)	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	GL_SEGMENT9_WID	NUMBER	10	0	COALESCE(LKP_W_GL_SEGMENT_D9.SCD1_WID,0)	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	GL_SEGMENT10_WID	NUMBER	10	0	COALESCE(LKP_W_GL_SEGMENT_D10.SCD1_WID,0)	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	SEG_PROJECT_WID	NUMBER	10	0	COALESCE(LKP_W_GL_SEGMENT_D_PROJECT.SCD1...	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	SEG_PROGRAM_WID	NUMBER	10	0	COALESCE(LKP_W_GL_SEGMENT_D_PROGRAM.SCD...	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	BUDGET_WID	NUMBER	10	0	COALESCE(SQ_W_GL_OTHER_FS.BUDGET_WID,0)	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	BALANCE_TYPE_WID	NUMBER	10	0	COALESCE(SQ_W_GL_OTHER_FS.BALANCE_TYPE_...	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	FINANCIAL_GL_FLG	VARCHAR2	1	0	SQ_W_GL_OTHER_FS.FINANCIAL_GL_FLG	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	BUDGETARY_CONTROL_FLG	VARCHAR2	1	0	SQ_W_GL_OTHER_FS.BUDGETARY_CONTROL_FLG	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	JOURNAL_CATEGORY	VARCHAR2	30	0	SQ_W_GL_OTHER_FS.JOURNAL_CATEGORY	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	RECON_FLG	CHAR	1	0	SQ_W_GL_OTHER_FS.RECON_FLG	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	BUDGET_LEDGER_WID	NUMBER	10	0	COALESCE(SQ_W_GL_OTHER_FS.BUDGET_LEDGER_...	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	BUDGET_MCAL_CAL_WID	NUMBER	10	0	COALESCE(SQ_W_GL_OTHER_FS.BUDGET_MCAL_C...	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	BUDGET_PERIOD_WID	NUMBER	15	0	COALESCE(SQ_W_GL_OTHER_FS.BUDGET_PERIOD_...	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	JOURNAL_SOURCE_WID	NUMBER	10	0	COALESCE(SQ_W_GL_OTHER_FS.JOURNAL_SOURC...	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	BUDGET_TRANS_TYPE_INDICATOR	VARCHAR2	80	0	SQ_W_GL_OTHER_FS.BUDGET_TRANS_TYPE_INDIC...	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	X_BATCH_DESCRIPTION	VARCHAR2	240	0		
	<input type="checkbox"/>	<input type="checkbox"/>	JOURNAL_HEADER_DESCR	VARCHAR2	240	0	SQ_W_GL_OTHER_FS.JOURNAL_HEADER_DESCR	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	JOURNAL_LINE_DESCR	VARCHAR2	240	0	SQ_W_GL_OTHER_FS.JOURNAL_LINE_DESCR	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	ACCT_PERIOD_END_DT_KEY	NUMBER	10	0	COALESCE(SQ_W_GL_OTHER_FS.ACCT_PERIOD_E...	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	X_USER_JE_CATEGORY_NAME	VARCHAR2	25	0		
	<input type="checkbox"/>	<input type="checkbox"/>	EXCHANGE_DT	DATE	7	0	SQ_W_GL_OTHER_FS.EXCHANGE_DT	Sour
	<input type="checkbox"/>	<input type="checkbox"/>	X_JE_EXTERNAL_REFERENCE	VARCHAR2	80	0		
	<input type="checkbox"/>	<input type="checkbox"/>	X_JE_LINE_DESCRIPTION	VARCHAR2	240	0		
	<input type="checkbox"/>	<input type="checkbox"/>	X_USER_JE_SOURCE	VARCHAR2	25	0		

11. Generate a Scenario for the newly customized ETL task.

Ensure the Scenario Name matches the ready-to-use Scenario Name but use a Version Number that is larger than any previously used Version Number. The BI Apps Load Plans are configured to run the scenario with the largest number. By retaining the same scenario name and assigning the largest scenario version number, you do not have to make any changes to the load plan.



12. Apply customizations to the generated load plans as per the Customization methodology.

5

Post-Upgrade Tasks

Review the upgrade changes in warehouse schema and data and perform the suggested changes.

If you are upgrading from Oracle BI Applications 11.1.1.10.3PS3 to 11.1.1.10.3PS4, no DDL changes are required. You just need to make sure that the PB4 (Patch Bundle 4) is applied before you perform the in-place upgrade.

If you are upgrading from Oracle BI Applications 11.1.1.10.3/11.1.1.10.3PS2 to 11.1.1.10.3PS4, it's recommended that you check and execute the listed DDL changes and apply the PB2 (Patch Bundle 2) before proceeding with the in-place upgrade.

```
Grant DBMS_CRYPTO privilege to Warehouse schema user;  
Grant execute on DBMS_CRYPTO to %_DW;
```

Execute the following commands on the Warehouse schema:

```
ALTER TABLE W_ORA_INVPROD_DS_TMP MODIFY PRODUCT_NUM VARCHAR2(40 CHAR);  
ALTER TABLE W_INVENTORY_PRODUCT_DS MODIFY PRODUCT_NUM VARCHAR2(40 CHAR);  
ALTER TABLE W_INVENTORY_PRODUCT_D MODIFY PRODUCT_NUM VARCHAR2(40 CHAR);  
ALTER TABLE W_PURCH_RCPT_FS MODIFY RECEIPT_TEXT VARCHAR2(4000 CHAR);  
ALTER TABLE W_PURCH_RCPT_F MODIFY RECEIPT_TEXT VARCHAR2(4000 CHAR);  
ALTER TABLE W_PURCH_RCPT_TMP MODIFY RECEIPT_TEXT VARCHAR2(4000 CHAR);
```

Part III

Out-of-Place Upgrade

Oracle recommends out-of-place upgrade for the following upgrade cases:

- If you want to upgrade from Oracle BI Applications 11.1.1.10.2 and prior releases to Oracle BI Applications 11.1.1.10.3 PS4 (Oracle Fusion Middleware Infrastructure 11g to the latest Oracle Fusion Middleware Infrastructure 12c).
- If you want to upgrade from Oracle BI Applications 11.1.1.10.3 to Oracle BI Applications 11.1.1.10.3 PS4 having target RCU platform on Oracle Autonomous Transaction Processing (ATP) Database.

Topics:

- [Upgrade the Oracle Data Integrator 11g Customization Code](#)
- [Upgrade the Oracle Data Integrator 12c Customization Code](#)
- [Move Oracle Business Analytics Warehouse Customization Changes](#)
- [Move the Customization Changes in the Oracle BI Applications Configuration Manager](#)
- [Move the JAZN File, Repository, and Presentation Catalog Customization Changes](#)

Upgrade the Oracle Data Integrator 12c Customization Code

To upgrade from Oracle BI Applications 11.1.1.10.3 to Oracle BI Applications 11.1.1.10.3 PS4 having target RCU platform on Oracle Autonomous Transaction Processing (ATP) Database, import the Oracle Data Integrator customizations.

See [Import and Apply ETL Customizations](#), [Import Datastores](#), and [Import Customized ETL Tasks](#).

6

Upgrade the Oracle Data Integrator 11g Customization Code

Upgrade the Oracle Data Integrator 11g customization code to 12c.

Oracle recommends that you recreate the Oracle Data Integrator (ODI) customizations in 12c for the following reasons:

- If you decide to export the customizations from your prior releases of the ODI repository using the Smart Export or the Regular Export methods, then there's a significant possibility that the ready-to-use ODI 12c repository that's included in this Oracle BI Applications release becomes corrupted. This corruption can occur when the Smart Export process brings in all the references to the exported objects from the ODI 11g repository such as the ready-to-use user-defined functions, knowledge modules, procedures, and reusable maps. Also, while importing these objects, the ready-to-use ODI 12c baseline code may be over-written.
- If you recreate the mapping in ODI 12c, then you can avoid any issues that you may face during the upgrade process.

7

Move Oracle Business Analytics Warehouse Customization Changes

This section describes moving the customization changes that you'd made in Oracle Business Analytics Warehouse.

Topics

- [Update the Oracle Business Analytics Warehouse BIApps Warehouse Model](#)
- [Generate the Data Definition Language for Oracle Business Analytics Warehouse](#)
- [Reimplement the Table Partitions](#)

Update the Oracle Business Analytics Warehouse BIApps Warehouse Model

Prior to moving the customization changes that you'd made in Oracle Business Analytics Warehouse to the data warehouse schema, you must first update the ODI BI Applications Warehouse model "Oracle BI Applications" with all the customization changes by connecting to the ready-to-use ODI 12c repository.

Generate the Data Definition Language for Oracle Business Analytics Warehouse

Deploy the customization changes of Oracle Business Analytics Warehouse into the warehouse schema of Oracle BI Applications release 11.1.1.10.3 PS4 using the GENERATE_DW_DDL scenario.

See [Generating the Oracle Business Analytics Warehouse DDL](#).

1. Launch ODI Studio and display the Designer navigator.
2. In the Projects editor, expand the **Components**, **DW**, **Oracle**, and **Generate DW DDL** folders.
3. Execute the GENERATE_DW_DDL scenario:

Specify this information:

Option	Description
CREATE_SCRIPT_FILE	If set to True, this option creates a .sql file with the DDL script.
E	The .sql file is useful to see the changes. If no value is provided for the SCRIPT_LOCATION option, then the procedure creates a file in the oracledi directory named biappsddl.sql.

Option	Description
REFRESH_MODE	Use the INCREMENTAL mode. The INCREMENTAL mode compares the ODI data stores with the tables in the database. Use this option with the Table Mask option to speed up the comparison process of the entire data warehouse.
CHARCLAUSE	Provided for Unicode support. If set to True, the CHAR clause is included in the DDL.
RUN_DDL	If set to True, the DDL runs against your warehouse.
SCRIPT_LOCATION	If you're creating a script, then this field indicates the path where the script is created.
TABLE_MASK	Select the default % as it compares all tables. If you want to create the DDL for only a subset of tables or just a single table, then you can change this value. For instance, to create a different script for dimension tables, you can set this value to W_%_D.

Reimplement the Table Partitions

Reimplement the table partitions using the IMPLEMENT_DW_TABLE_PARTITIONS scenario.

See Partitioning Tables for Human Resource Analytics.

8

Move the Customization Changes in the Oracle BI Applications Configuration Manager

This section describes moving the customization changes of the Oracle BI Applications Configuration Manager.

Topics

- [Upgrade Oracle Business Intelligence Applications Configuration Manager](#)
- [About Exporting and Importing Setup Data](#)
- [Export the Setup Data](#)
- [Import the Setup Data](#)

Upgrade Oracle Business Intelligence Applications Configuration Manager

Perform the following steps to upgrade Oracle Business Intelligence Applications Configuration Manager from release 11.1.1.10.2 and prior releases to release 11.1.1.10.3 PS4:

You must reconfigure the following in Oracle Business Intelligence Applications Configuration Manager release 11.1.1.10.3 PS4:

- Externally conformed domains
- Preferred currencies
- Language and regional settings

Note:

Oracle strictly recommends customers to upgrade all their sources to the latest version and register with the PLV's available in Oracle Business Intelligence Applications. For more details about the product lines that are supported, see the Oracle Fusion Middleware Supported System Configurations information on Oracle Technology Network.

Before moving the Oracle Business Intelligence Applications Configuration Manager customization, ensure that you take a backup of the BIACM_COMP schema. You can restore the schema, if the customization data gets corrupted during the migration process.

Oracle Business Intelligence Applications Configuration Manager release 11.1.1.10.3 PS4 doesn't support all the product line versions (PLV) that were available in the prior releases. It supports these PLVs:

- Oracle E-Business Suite R12.2.x
- Oracle Fusion Applications 11.x
- JD Edwards EnterpriseOne 9.1.x
- PeopleSoft Enterprise 9.2
- Siebel CRM 8.2.2.x
- Taleo Recruitment 15A
- Universal Adapter for BI Applications

To upgrade from Oracle Business Intelligence Applications release 11.1.1.10.2 to release 11.1.1.10.3 PS4, perform these steps:

1. Identify whether the PLV is the same from the prior release environments of Oracle Business Intelligence Applications.
2. If the PLV of the source application is the same from the prior release environments of Oracle Business Intelligence Applications, then perform these tasks:
 - a. Register the source application in Oracle Business Intelligence Applications release 11.1.1.10.3 PS4 with the same DSN.
 - b. Run the domain load plan.
 - c. Export the setup data from the prior release of Oracle Business Intelligence Applications Configuration Manager.
 - d. Import the setup data and verify that the customizations are in place.
3. If the PLV of the source application isn't the same from the prior release environments of Oracle Business Intelligence Applications, then perform these tasks:
 - a. Register the source application in Oracle Business Intelligence Applications release 11.1.1.10.3 PS4 with supported or available source PLV with the same DSN.
 - b. Run the domain load plan.
 - c. Export the setup data from the prior release of Oracle Business Intelligence Applications Configuration Manager.

 **Note:**

Before exporting the setup data, ensure that you have only one PLV registered for each product supported in the prior releases of Oracle Business Intelligence Applications Configuration Manager. For example, Oracle Business Intelligence Applications Configuration Manager supported several PLVs of Oracle E-business Suite in prior releases. In such a case, ensure that you have only one source PLV registered in Oracle Business Intelligence Applications Configuration Manager. Otherwise it can cause failure while importing setup data.

- d. Edit the exported `instanceDatasources.xml` and `c_domain_member_map.xml` files to update the source PLV and `DatasourceNumId` to match the supported PLV in Oracle Business Intelligence

Applications release 11.1.1.10.3 PS4. For example, for any EBusiness Suite source PLVs, you must update the source PLV with code `EBS_12_2`.

- e. Import the setup data and verify that the customizations are in place.

 **Note:**

You might have trouble importing successfully due to customization setup data that's unsupported from a prior release. If you've issues importing, then configure Oracle Business Intelligence Applications Configuration Manager as a fresh installation.

You can use either of the following methods to upgrade from Oracle Business Intelligence Applications release 11.1.1.10.1 and prior releases to release 11.1.1.10.3 PS4:

1. Method 1:
 - a. Upgrade your existing Oracle Business Intelligence Applications installation in sequential order by release number, as described in the upgrade document. For example, if you're running Oracle Business Intelligence Applications release 11.1.1.7.1, then upgrade to release 11.1.1.8.1, then release 11.1.1.9.2, then release 11.1.1.10.1, and then release 11.1.1.10.2.
 - b. Register the source application in Oracle Business Intelligence Applications release 11.1.1.10.3 PS4 with the same DSN.
 - c. Run the domain load plan.
 - d. Export the setup data of Oracle Business Intelligence Applications Configuration Manager from the upgraded Oracle Business Intelligence Applications release 11.1.1.10.2.
 - e. Import the setup data and verify that the customizations are in place.
2. Method 2:
 - a. Set up Oracle Business Intelligence Applications Configuration Manager as a fresh installation.

About Exporting and Importing Setup Data

You export and import the setup data for the Configuration Manager.

You export and import the setup data to:

- Make a backup of your configuration settings for security purposes. For example, you might keep a record of the configuration changes that you've made.
- Migrate the setup data for the Configuration Manager from one environment to another environment. For example, you might move the configuration changes that you've made from a Test environment to a Production environment or from one release to another.

What Setup Data Is Exported?

When you export the setup data, you export the changes that you've made to the values of the following objects:

- Data Load Parameters

- Domains and Mappings
- Reporting Parameters

You export all changes that are different from the default values each time. The export process doesn't export the unchanged configuration values. In other words, if you only change the value of DEFAULT_CURRENCY from USD to Euro and export your data, then the export zip file that is produced only contains columns for "DEFAULT_CURRENCY=Euro".

Other Configuration Manager data (for example, source system configuration settings and configuration settings of Oracle Business Analytics Warehouse) isn't included in the export files. In other words, before you import to the target system, you must first respecify the source system and Oracle Business Analytics Warehouse.

For a successful migration, the data source number (DSN) in the target system must be the same as the DSN in the source system.

What Setup Data Is Imported?

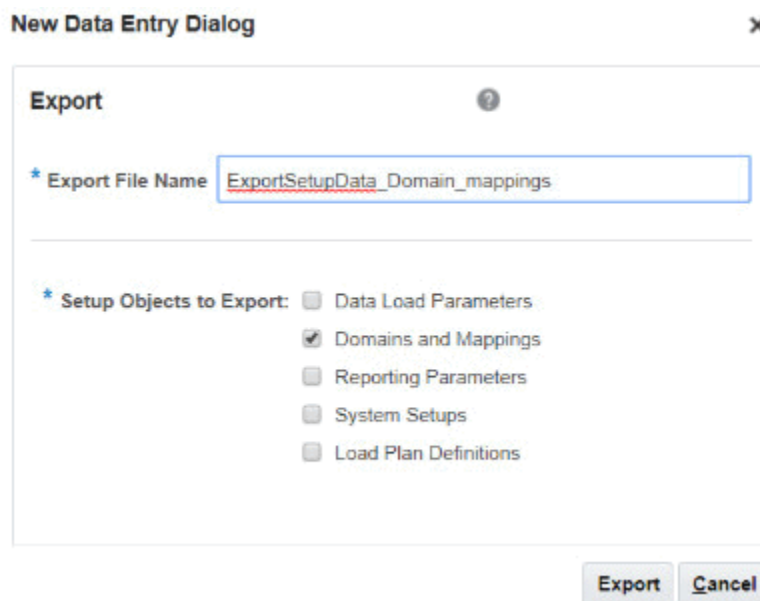
When you import the setup data from a zip file, you import whatever configuration changes were exported to that zip file.

For example, if you first export only the reporting parameters to a zip file, then you import only the changes that were made to the reporting parameters.

Export the Setup Data

You export the setup data to back-up or migrate a Configuration Manager environment.

1. In the source environment, start the Configuration Manager.
2. From the Tasks bar, select **Export Setup Data** to display the Export Setup Data dialog.
3. Click **Export Data** to display the Export Data dialog.



4. Specify the setup objects that you want to export.
5. Click **Export**.
6. When the File Download dialog is displayed, click **Save** to save the zip file to a location that you specify.

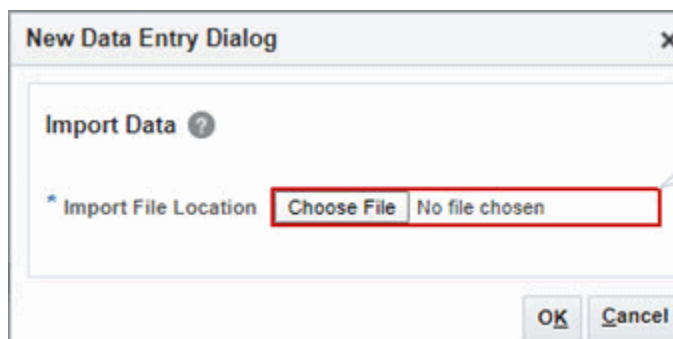
If you first click **Open** at the File Download dialog to open the zip file, then ensure that you save the zip file in the zip program that you're using.

Import the Setup Data

You import the setup data to restore or migrate the setup data.

Before you import the setup data, you must copy the previously exported zip file to a file location that is accessible from the machine that is running the Configuration Manager client. When you import the setup data, the data source number in the target system must be the same as the data source number in the source system.

1. In the source environment, start the Configuration Manager.
2. From the Tasks bar, select **Import Setup Data**.
3. Click **Import Data** to display the Import Data dialog.



4. Specify the location and name of the zip file that contains the configuration changes that you want to import.
5. Click **OK**.

The setup data is imported from the zip file.

9

Move the JAZN File, Repository, and Presentation Catalog Customization Changes

This section describes moving the customizations changes from Oracle BI Applications release 11.1.1.10.3 to Oracle BI Applications release 11.1.1.10.3 PS4 and from 11.1.1.10.2 and prior releases to 11.1.1.10.3 PS4 for the JAZN file, the repository, and the presentation catalog.

Based on the use case, follow the instructions to move the customization changes.

Topics

- [Case 1: Moving from Oracle BI Applications release 11.1.1.10.2 \(Oracle Business Intelligence Edition 11g\) to Oracle BI Applications release 11.1.1.10.3 PS4 \(Oracle Analytics Server\)](#)
- [Case 2: Moving from Oracle BI Applications Release 11.1.1.10.2 \(Oracle Business Intelligence Edition 12c\) to Oracle BI Applications Release 11.1.1.10.3 PS4 \(Oracle Analytics Server\)](#)
- [Case 3: Moving from Oracle BI Applications Release 11.1.1.10.1 and Previous Releases to Oracle BI Applications Release 11.1.1.10.3 PS4 \(Oracle Analytics Server\)](#)
- [Case 4: Moving from Oracle BI Applications Release 11.1.1.10.3 \(Oracle Analytics Server\) to Oracle BI Applications Release 11.1.1.10.3 PS4 \(Oracle Analytics Server\) Having Target RCU Platform on Oracle ATP Database](#)

Case 1: Moving from Oracle BI Applications release 11.1.1.10.2 (Oracle Business Intelligence Edition 11g) to Oracle BI Applications release 11.1.1.10.3 PS4 (Oracle Analytics Server)

Follow these instructions if you're moving the JAZN file, the repository, and the presentation catalog from Oracle BI Applications release 11.1.1.10.2 (based on Oracle Business Intelligence Edition 11g) to Oracle BI Applications release 11.1.1.10.3 PS4 (Oracle Analytics Server).

Topics

- [Prerequisites to Move the JAZN File, Repository, and Presentation Catalog](#)
- [Migrate the BI Artifacts for Oracle BI Applications Release 11.1.1.10.2](#)
- [Case 1: Upgrade the Repository File](#)
- [Case 1: Upgrade the Catalog](#)
- [Case 1: Upgrade the JAZN File](#)

Prerequisites to Move the JAZN File, Repository, and Presentation Catalog

Ensure that the following environments are set:

- Environment with Oracle BI Applications 11.1.1.10.2 setup.
- Environment with Oracle BI Applications 11.1.1.10.3 PS4 setup.
- Environment with [Oracle Analytics Server](#).

Migrate the BI Artifacts for Oracle BI Applications Release 11.1.1.10.2

Use these instructions to migrate the BI Artifacts for Oracle BI Applications release 11.1.1.10.2 to the BAR format.

1. Generate the BI Migration tool (bi-migration-tool.jar).

In the environment with Oracle Analytics Server, execute the following command:

```
Command path: <DOMAIN_HOME>/bitools/bin
./migration-tool.sh package bi-migration-tool.jar
```

2. Copy the bi-migration-tool.jar that you created to the environment with Oracle BI Applications release 11.1.1.10.2 using the command as seen in the sample:

```
$cp bi-migration-tool.jar /net/example123.us.oracle.com/scratch/
```

3. Create the export bundle.

In the environment with Oracle BI Applications release 11.1.1.10.2, execute the following command:

```
JDK_HOME/bin/java
-jar <Copied migration tool path>/bi-migration-tool.jar out
<ORACLE_BI_HOME>
<DOMAIN_HOME> <Export Bundle creation path>/11gExportBundle.jar
```

4. Copy the export bundle that you created to the environment with Oracle Analytics Server using the sample command:

```
user-abc@example123 /bin]$ cp /scratch/user-abc/
11gExportBundle.jar /net/example456.us.oracle.com/
```

5. Import the export bundle.

In the environment with Oracle Analytics Server, execute the command using the following syntax:

```
Command path: <DOMAIN_HOME>/bitools/bin
./migration-tool.sh in <export bundle> <service instance name>
```

Once the import is complete, you see the migration succeeded message. The migration moves all the content such as the system security configuration information, the Oracle BI repository, and the Oracle BI Presentation Services

Catalog of the Oracle BI Applications release 11.1.1.10.2 11g system to the Oracle Analytics Server standalone machine.

6. Restart the BI services in the environment with Oracle Analytics Server.
7. Take a backup of the Oracle BI Applications release 11.1.1.10.2 content (now in the 12c BAR format) in the environment with Oracle Analytics Server using the `./exportarchive` command:

```
Command path: <DOMAIN_HOME>/bitools/bin
./exportarchive.sh <instance_name> <bar file location>
encryptionpassword=<password>
```

For example, `./exportarchive.sh ssi /scratch/102OBIA_12c encryptionpassword=Admin123`.

Case 1: Upgrade the Repository File

Use these instructions to upgrade the repository or data model file (RPD).

To upgrade the file, you generate and apply a repository patch.

1. Generate a patch for the repository on the environment with Oracle BI Applications release 11.1.1.10.2.
 - In the environment with Oracle BI Applications release 11.1.1.10.2, take the repository files from these locations: Customer RPD - `<DOMAIN_HOME>/OracleBIServerComponent/coreapplication_obis1/repository/` and Oracle BI Applications release 11.1.1.10.2 baseline RPD - `<ORACLE_HOME>/biapps/admin/provisioning/OracleBIServerComponent/rpdbaseline`.
 - Set the `ORACLE_HOME` and `LD_LIBRARY_PATH` as these examples:
 - `setenv ORACLE_HOME /scratch/work/mw4675/Oracle_BI1/`
 - `setenv LD_LIBRARY_PATH $ORACLE_HOME/bifoundation/server/bin:$LD_LIBRARY_PATH`
 - Compare the two repository files using the `comparerpd` command and generate a patch on 11g:

```
Command path: <ORACLE_HOME>/bifoundation/server/bin/
Syntax: ./comparerpd.sh -P pwd_custom -C 11.1.1.10.2Custom.rpd -W
pwd_GA -G 11.1.1.10.2GA.rpd -D
patch.xml
```

For example,

```
./comparerpd.sh -P <password> -C
/scratch/work/mw4675/instances/instance1/bifoundation/
OracleBIServerComponent/coreapplication_obis1/repository/
Customized_OracleBIApps_BI0008.rpd -W Admin123 -G
/scratch/work/mw4675/Oracle_BI1/biapps/admin/provisioning/
OracleBIServerComponent/rpdbaseline/OracleBIApps.rpd -D
/scratch/102patch.xml
```

2. Apply the 11g custom repository patch on the Oracle BI Applications release 11.1.1.10.3 PS4 repository file using these steps:
 - a. Copy the patch that you'd generated from the environment with Oracle BI Applications release 11.1.1.10.2 to the environment with Oracle Analytics Server.
 - b. In the environment with Oracle BI Applications release 11.1.1.10.3 PS4 setup, download the Oracle BI Applications release 11.1.1.10.3 PS4 general availability (GA) repository file from the location <DOMAIN_HOME>/bitools/bin/ using this command:

```
Command path: <DOMAIN_HOME>/bitools/bin
              ./datamodel.sh downloadrpd -O <export_location> -SI
              <service_instancename> -U <username> -P
              <password>
```

For example, `./datamodel.sh downloadrpd -O /scratch/103PS4GA -SI biainstance -U <username> -P <password>`.

- c. Copy the downloaded Oracle BI Applications release 11.1.1.10.3 PS4 GA repository file to the standalone Oracle Analytics Server machine.
- d. Use the `patchrpd.sh` command to apply the patch on the Oracle BI Applications release 11.1.1.10.3 PS4 GA repository file:

```
Command path: <DOMAIN_HOME>/bitools/bin
              ./patchrpd.sh -C <10.3 PS4 GA RPD> -G <10.2 GA RPD> -I <11g
              Patch file> -O Merged.rpd -V decision.csv
              -U -N -8 -A -S patchpassword
```

For example,

```
./patchrpd.sh -C /scratch/103PS4GA.rpd -G /scratch/102GA.rpd -I
              /scratch/102patch.xml -O /scratch/Merged.rpd -V
              /scratch/decision.csv -U -N -8 -A -S <password>
```

Provide passwords when prompted.

 **Note:**

- U is an optional argument that applies default decisions for conflicts automatically so that `patchrpd` can finish successfully. If you don't include this parameter, then `patchrpd` displays a warning and exits if a conflict is detected.
- N is an optional argument that is used to ignore all non-fatal errors. Examples of non-fatal errors are unresolved objects, duplicated objects, and broken or incorrect expressions.
- 8 specifies the UTF-8 encoding.
- A is an optional argument used to skip the subset patching and instead apply the patch using input repository files.
- This example applies `102patch.xml` to the Oracle BI Applications release 11.1.1.10.3 PS4 GA repository, and then generates an output repository called `Merged.rpd` and an output decision file named `decision.csv`. The "Merged" repository file is the "Upgraded" repository file that has the release 11.1.1.10.3 PS4 content and the customizations.

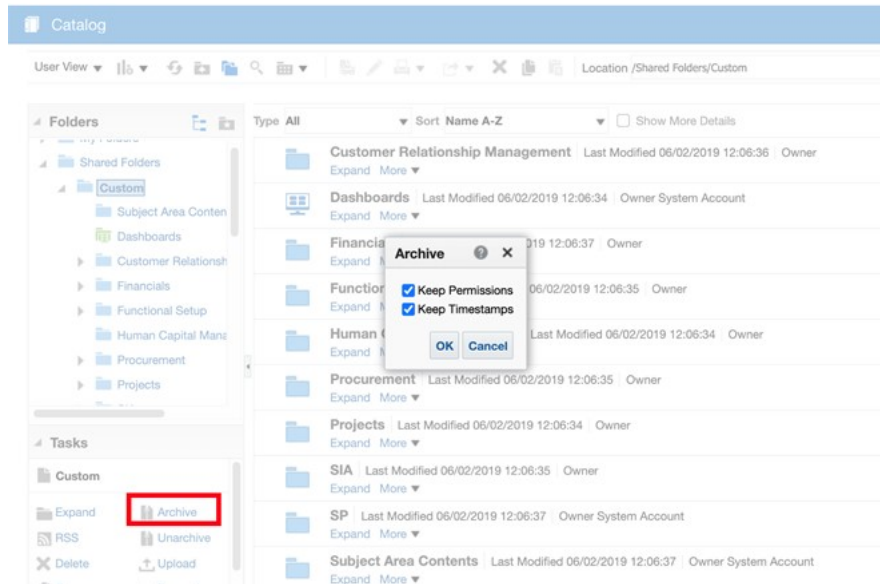
- e. Upload the "Upgraded" repository file to the Oracle BI Applications release 11.1.1.10.3 PS4 setup:
 - Copy the "Merged" repository file from the Oracle Analytics Server standalone machine to the Oracle BI Applications release 11.1.1.10.3 setup.
 - Upload the "Merged" repository file to the instance using the command `path<DOMAIN_HOME>/bitools/bin`
For example, `./datamodel.sh uploadrpd -I /scratch/Merged.rpd -SI biainstance -U <username> -P <password>`.
- f. Restart the BI services.
3. Verify the Oracle BI Applications release 11.1.1.10.3 PS4 repository file.
 - a. Download the repository file from the environment with Oracle BI Applications release 11.1.1.10.3 PS3 setup using the command `path: <DOMAIN_HOME>/bitools/bin`
For example, `./datamodel.sh downloadrpd -O /scratch/BIAPPS103Upgraded.rpd -SI biainstance -U <username> -P <password>`
 - b. Using the Oracle Analytics Client tool, open the downloaded repository file and verify that the custom changes are present.
See [Download page for Oracle Analytics Client Tools](#).

Case 1: Upgrade the Catalog

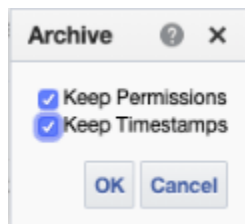
Use these instructions to upgrade the catalog.

As a standard practice, when you customize the ready-to-use content, save your content in a separate Custom folder. Ensure that you create reports under the Custom folder only. The Upgrade process preserves the content only in the Custom folder.

1. Open the Analytics link for the environment with Oracle Analytics Server setup using the URL appropriate for your environment in the sample format, `http://<hostname>:<port>/analytics`.
2. Click **Catalog** to view the content in the Shared Folders.

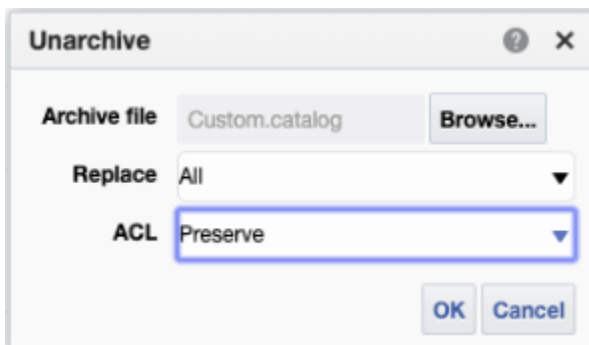


3. Archive the custom content from the Analytics catalog of the environment with the Oracle Analytics Server setup:
 - a. Select the Custom folder to be archived and then click **Archive**.
 - b. Enable the check boxes to keep the permissions and timestamps.



You see the custom archive downloaded; for example, Custom catalog.

4. Open the Analytics link for the environment with the Oracle BI Applications release 11.1.1.10.3 PS4 setup using the sample url `http://<hostname>:<port>/analytics`.
5. Unarchive the custom content to the Analytics page of the environment with the Oracle BI Applications release 11.1.1.10.3 PS4 setup:
 - a. Select the parent folder of the Custom folder where you want to place the release 11.1.1.10.2 content.
 - b. Click **Unarchive**, select the archive file, set **Replace** to **All** and **ACL** to **Preserve** and then click **OK**.



6. On the Analytics page of the environment with the Oracle BI Applications release 11.1.1.10.3 PS4 setup, navigate to the catalog and verify that the custom content is present.

Case 1: Upgrade the JAZN File

Use these instructions to upgrade the JAZN file.

1. Copy the Oracle BI Applications release 11.1.1.10.2 BAR file from the environment with Oracle Analytics Server to the environment with Oracle BI Applications release 11.1.1.10.3 PS4.

Use the command `$ cp <102 OBIA 12C BAR> /net/example123.us.oracle.com/scratch/.`

2. Import the content only from the JAZN file to the environment with Oracle BI Applications release 11.1.1.10.3 using the `importarchive` command:

Command path:
`<DOMAIN_HOME>/bitools/bin
 ./importarchive.sh <service instance name> <102 OBIA 12C Bar>
 nocontent nodatamodel encryptionpassword=<password>`

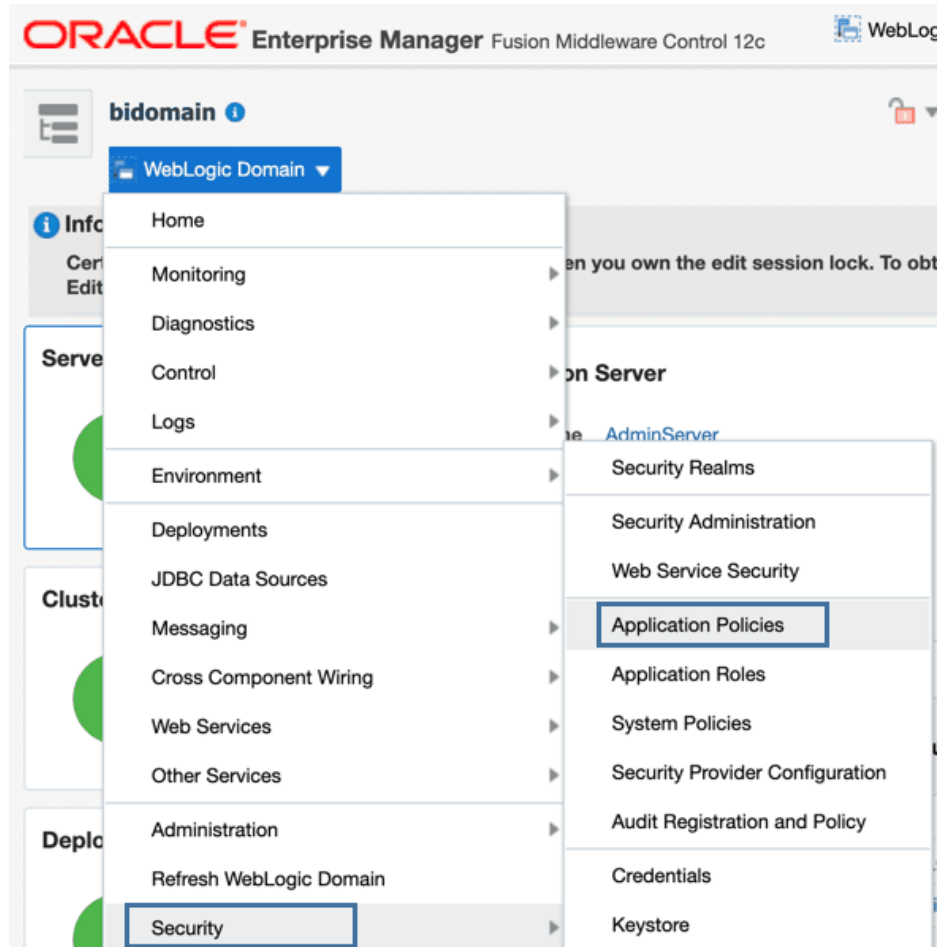
For example, `./importarchive.sh biainstance /scratch/ssi_jazn.bar nocontent nodatamodel encryptionpassword=Admin123`

Note:

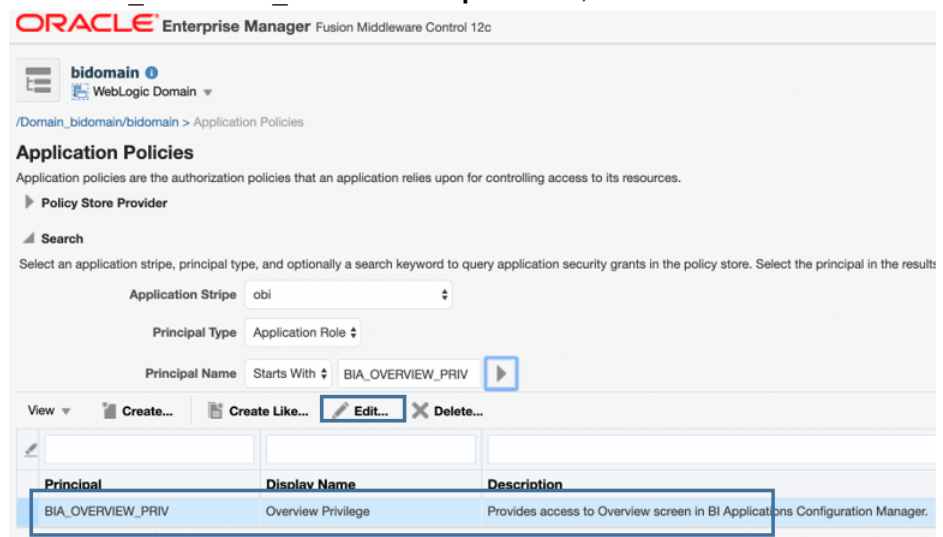
Exclude the repository file and the Presentation Catalog, because they have already been upgraded in the environment with Oracle BI Applications release 11.1.1.10.3 PS4.

3. Restart the BI services.
4. Open the environment with Oracle BI Applications release 11.1.1.10.3 PS4 using the sample URL `http://<hostname>:<port>/em` and verify that the custom application roles are present in the upgraded Oracle BI Applications release 11.1.1.10.3 PS4 environment.
5. In Oracle Enterprise Manager, add two permissions for Oracle Business Intelligence Applications Configuration Manager using these instructions:

- a. Sign in to Oracle Enterprise Manager, navigate to Security, and then select **Application Policies**.



- b. Select **obi** in **Application Stripe**.
- c. Enter **BIA_OVERVIEW_PRIV** in **Principal Name**, and then click **Search**.



- d. Select the **BIA_OVERVIEW_PRIV** row and click **Edit**.

- e. In the Edit page for BIA_OVERVIEW_PRIV, under Permissions, click **Add**.

ORACLE Enterprise Manager Fusion Middleware Control 12c

bidomain WebLogic Domain

/Domain_bidomain/bidomain > Application Policies > Edit Application Grant

View + Add X Delete... Detach

Name	Display Name	Type	Description
BIA_OVERVIEW_PRIV	Overview Privilege	Application Role	Provides access to Overview screen in BI Applications Configuration Manager.

Permissions

Select from permissions and resources used in this application. Enter search criteria to search for right permissions.

View + Add Edit... X Delete... Detach

Permission Class	Resource Name	Resource Type
oracle.adf.share.security.authorization.RegionPermission	oracle.apps.fnd.applcore.ui...	
oracle.adf.controller.security.TaskFlowPermission	/WEB-INF/oracle/apps/fnd/...	

- f. In the Add Permissions dialog that lists the search options, click **Continue**.

Add Permission

Select from permissions and resources used in this application. Enter search criteria to search for right permissions.

Search

Permissions Resource Types

Permission Class oracle.adf.controller.security.TaskFlowPermission

Resource Name Starts With

Search Results

Resource Name	Resource Type	Permission Actions
No permissions added.		

TIP Continue to go to next step if you want to enter policy details.

Continue Cancel

- g. In the Add Permission dialog, enter the following permission class, resource name, and permission actions, and then click **Select** after adding each permission details:

- Permission Class:** oracle.adf.controller.security.TaskFlowPermission
Resource Name: /WEB-INF/oracle/apps/bi/configmgr/view/ui/taskflow/preferences/regionalTF.xml#regionalTF
Permission Actions: View

Add Permission

Customize

* Permission Class oracle.adf.controller.security.TaskFlowPermission

Resource Name /WEB-INF/oracle/apps/bi/configmgr/view/ui/taskflow/preferences/regionalTF.xml#regionalTF

Permission Actions View

- Permission Class:** oracle.adf.controller.security.TaskFlowPermission
Resource Name: /WEB-INF/oracle/apps/bi/configmgr/view/ui/taskflow/preferences/languageTF.xml#languageTF
Permission Actions: View

Add Permission	
Customize	
* Permission Class	oracle.adf.controller.security.TaskFlowPermission
Resource Name	/WEB-INF/oracle/apps/bi/configmgr/view/ui/taskflow/preferences/languageTF.xml#languageTF
Permission Actions	View

Ensure that the newly added rows are visible under BIA_OVERVIEW_PRIV.

- h. Click **OK**, save, and exit.
6. Add additional Oracle Analytics Server application roles.
 - a. Sign in to Oracle Enterprise Manager and navigate to **Security**.
 - b. In Security, click **Application Roles** and then click **Create**.
 - c. In Create Application Roles, add the DVContentAuthor and DVConsumer application roles. Add BIAuthor as a member of DVContentAuthor and BIconsumer as a member of DVConsumer.
7. Assign Oracle Analytics Server permission sets to the Oracle BI Applications application roles by executing the following script from the <DOMAIN_HOME>/bi/bitools/bin location:

Application role	Script to assign permission set to application role
BIAdministrator	<pre>./ grantPermissionSetsToBIRole.sh - r BIAdministrator -p actio.admin,bip.administrator,cu stomScripts.admin,majel.administ rator,obips.administrator,obis.a dministrator,obisch.administrato r,pod.admin,sac.advanced.approle .administrator,sac.approle.admin istrator,sac.snapshot.administra tor,va.admin</pre>
BIAuthor	<pre>./ grantPermissionSetsToBIRole.sh - r BIAuthor -p bip.author,bisecurity.author,obi sch.author</pre>

Application role	Script to assign permission set to application role
DVContentAuthor	<pre>./ grantPermissionSetsToBIRole.sh - r DVContentAuthor -p actio.author,va.author</pre>
DVConsumer	<pre>./ grantPermissionSetsToBIRole.sh - r DVConsumer -p va.interactor</pre>
BIConsumer	<pre>./ grantPermissionSetsToBIRole.sh - r BIConsumer -p oracle.bi.dss.CustomKnowledge.co nsumer,oracle.bi.tech.dv.consume r,bisecurity.author,bip.consumer ,rdc.consumer</pre>

Case 2: Moving from Oracle BI Applications Release 11.1.1.10.2 (Oracle Business Intelligence Edition 12c) to Oracle BI Applications Release 11.1.1.10.3 PS4 (Oracle Analytics Server)

Follow these instructions if you're moving the JAZN file, the repository, and the presentation catalog from Oracle BI Applications release 11.1.1.10.2 (based on Oracle Business Intelligence Edition 12c) to Oracle BI Applications release 11.1.1.10.3 PS4.

Prerequisites to move the JAZN file, the repository, and the presentation catalog are the same as those for Case 1. See [Prerequisites to Move the JAZN File, Repository, and Presentation Catalog](#).

Topics

- [Case 2: Upgrade the Repository File](#)
- [Case 2: Upgrade the Catalog](#)
- [Case 2: Upgrade the JAZN File](#)

Case 2: Upgrade the Repository File

Use these instructions to upgrade the repository or data model file (RPD).

To upgrade the file, you generate and apply a repository patch.

1. Generate a patch for the repository on the environment with Oracle BI Applications release 11.1.1.10.2.

- a. In the environment with Oracle Analytics Server, download the custom repository file using the `<DOMAIN_HOME>/bitools/bin` command path. For example, `./datamodel.sh downloadrpd -O /scratch/ BIAPPS102Custom.rpd -SI biainstance -U <username> -P <password>`.

- b. In the environment with Oracle Analytics Server, copy the Oracle BI Applications release 11.1.1.10.2 baseline repository file from the environment with Oracle Analytics Server using this command:

```
$cp/net/BIAPPS102.us.oracle.com/<ORACLE_HOME>/biapps/admin/
provisioning/OracleBIserverComponent/rpdbaseline/
OracleBIApps.rpd/scratch/
```

- c. Compare the custom and release 11.1.1.10.2 baseline repository files using the `comparerpd` command and generate a patch:

```
Commandpath:
    <DOMAIN_HOME>/bitools/bin/
Syntax: ./comparerpd.sh -P pwd_custom -C
11.1.1.10.2Custom.rpd -W pwd_GA -G 11.1.1.10.2GA.rpd
    -D patch.xml
```

For example,

```
./comparerpd.sh -P Admin123 -C /scratch/BIAPPS102Custom.rpd -W
Admin123 -G /scratch/OracleBIApps.rpd -D
    /scratch/102patch.xml
```

2. Apply the custom repository patch on the Oracle BI Applications release 11.1.1.10.3 PS4 repository file using these steps:
 - a. In the environment with Oracle BI Applications release 11.1.1.10.3 PS4 setup, download the Oracle BI Applications release 11.1.1.10.3 PS4 general availability (GA) repository file from the location `<DOMAIN_HOME>/bitools/bin/` using this command:

```
Command path: <DOMAIN_HOME>/bitools/bin./datamodel.sh
    downloadrpd -O <export_location> -
SI<service_instancename > -U <username> -P
    <password>
```

For example,

```
./datamodel.sh downloadrpd -O /scratch/103GA -SI biainstance -
U<username>
    -P
    <password>
```

- b. Copy the downloaded Oracle BI Applications release 11.1.1.10.3 PS4 GA repository file to the environment with Oracle Analytics Server. Use the

`patchrpd.sh` command to apply the patch on the Oracle BI Applications release 11.1.1.10.3 PS4 repository file:

```
Command path: <DOMAIN_HOME>/bitools/bin
./patchrpd.sh -C <10.3 GA RPD> -G <10.2 GA RPD> -I <Custom
Patch file> -O Merged.rpd -V decision.csv
-U-N -8 -A -S patchpassword
```

For example,

```
./patchrpd.sh -C /scratch/103GA.rpd -G /scratch/102GA.rpd -I
/scratch/102patch.xml -O /scratch/Merged.rpd -V /scratch/
decision.csv -U -N -8 -A -S <password>
```

Provide passwords when prompted.

Note:

- U is an optional argument that applies default decisions for conflicts automatically so that `patchrpd` can finish successfully. If you don't include this parameter, then `patchrpd` displays a warning and exits if a conflict is detected.
- N is an optional argument that is used to ignore all non-fatal errors. Examples of non-fatal errors are unresolved objects, duplicated objects, and broken or incorrect expressions.
- 8 specifies the UTF-8 encoding.
- A is an optional argument used to skip subset patching and instead apply the patch using the input repository files.
- This example applies `102patch.xml` to the Oracle BI Applications release 11.1.1.10.3 PS4 GA repository, and then generates an output repository called `Merged.rpd` and an output decision file named `decision.csv`. The "Merged" repository file is the "Upgraded" repository file that has the release 11.1.1.10.3 PS4 content and the customizations.

3. Upload the "Upgraded" repository file to the Oracle BI Applications release 11.1.1.10.3 PS4 setup:
 - a. Copy the "Merged" repository file from the Oracle Analytics Server standalone machine to the Oracle BI Applications release 11.1.1.10.3 setup
 - b. Upload the "Merged" repository file to the instance using the `<DOMAIN_HOME>/bitools/bin` command path. For example,

```
./datamodel.sh uploadrpd -I /scratch/Merged.rpd -SI biainstance -U
<username> -P <password>
```

- c. Restart the BI services.
4. Verify the Oracle BI Applications release 11.1.1.10.3 PS4 repository file.

- a. Download the repository file from the environment with the Oracle BI Applications release 11.1.1.10.3 PS4 setup using the `<DOMAIN_HOME>/bitools/bin` command path. For example,

```
./datamodel.sh downloadrpd -O /scratch/BIAPPS103Upgraded.rpd -SI  
biainstance -U <username> -P  
          <password>
```

- b. Using the [Oracle Analytics Client Tool](#), open the downloaded repository file and verify that the custom changes are present.

Case 2: Upgrade the Catalog

Use the instructions for Case 1.

See [Case 1: Upgrade the Catalog](#).

Case 2: Upgrade the JAZN File

Use the instructions for Case 1.

See [Case 1: Upgrade the JAZN File](#).

Case 3: Moving from Oracle BI Applications Release 11.1.1.10.1 and Previous Releases to Oracle BI Applications Release 11.1.1.10.3 PS4 (Oracle Analytics Server)

Upgrade your existing Oracle BI Applications installation in sequential order by release number, as described in the upgrade document. For example, if you're running Oracle BI Applications release 11.1.1.7.1, then upgrade to release 11.1.1.8.1, then release 11.1.1.9.2, then release 11.1.1.10.1, and then release 11.1.1.10.2.

After you've upgraded up to Oracle BI Applications release 11.1.1.10.2, then follow the steps mentioned in Case 1. See [Case 1: Moving from Oracle BI Applications release 11.1.1.10.2 \(Oracle Business Intelligence Edition 11g\) to Oracle BI Applications release 11.1.1.10.3 PS4 \(Oracle Analytics Server\)](#).

Case 4: Moving from Oracle BI Applications Release 11.1.1.10.3 (Oracle Analytics Server) to Oracle BI Applications Release 11.1.1.10.3 PS4 (Oracle Analytics Server) Having Target RCU Platform on Oracle ATP Database

Follow these instructions if you're moving the JAZN file, the repository, and the presentation catalog from Oracle BI Applications release 11.1.1.10.3 (based on Oracle

Analytics Server) to Oracle BI Applications release 11.1.1.10.3 PS4 having target RCU platform on Oracle ATP Database.

Topics

- [Prerequisites to Move the JAZN File, Repository, and Presentation Catalog](#)
- [Case 4: Upgrade the Repository File](#)
- [Case 4: Upgrade the Catalog](#)
- [Case 4: Upgrade the JAZN File](#)

Prerequisites to Move the JAZN File, Repository, and Presentation Catalog

Ensure that the following environments are set:

- Environment with Oracle BI Applications 11.1.1.10.3 setup.
- Environment with Oracle BI Applications 11.1.1.10.3 PS4 setup.
- Environment with [Oracle Analytics Server](#).

Case 4: Upgrade the Repository File

Use these instructions to upgrade the repository or data model file (RPD).

To upgrade the file, you generate and apply a repository patch.

1. Generate a patch for the repository on the environment with Oracle BI Applications release 11.1.1.10.3.
 - a. In the environment with Oracle Analytics Server, download the custom repository file using the `<DOMAIN_HOME>/bitools/bin` command path. For example, `./datamodel.sh downloadrpd -O /scratch/ BIAPPS103Custom.rpd -SI biainstance -U <username> -P <password>`.
 - b. In the environment with Oracle Analytics Server, copy the Oracle BI Applications release 11.1.1.10.3 baseline repository file from the environment with Oracle Analytics Server using this command:

```
$cp/net/BIAPPS103.us.oracle.com/<ORACLE_HOME>/biapps/admin/
provisioning/OracleBIserverComponent/rpdbaseline/OracleBIApps.rpd/
scratch/
```

- c. Compare the custom and release 11.1.1.10.3 baseline repository files using the `comparerpd` command and generate a patch:

```
Commandpath:
    <DOMAIN_HOME>/bitools/bin/
Syntax: ./comparerpd.sh -P pwd_custom -C
11.1.1.10.3Custom.rpd -W pwd_GA -G 11.1.1.10.3GA.rpd
-D patch.xml
```

For example,

```
./comparerpd.sh -P Admin123 -C /scratch/BIAPPS103Custom.rpd -W
Admin123 -G /scratch/OracleBIApps.rpd -D
/scratch/103patch.xml
```

2. Apply the custom repository patch on the Oracle BI Applications release 11.1.1.10.3 PS4 repository file using these steps:
 - a. In the environment with Oracle BI Applications release 11.1.1.10.3 PS4 setup, download the Oracle BI Applications release 11.1.1.10.3 PS4 general availability (GA) repository file from the location <DOMAIN_HOME>/bitools/bin/ using this command:

```
Command path: <DOMAIN_HOME>/bitools/bin./datamodel.sh
downloadrpd -O <export_location> -
SI<service_instancename > -U <username> -P
<password>
```

For example,

```
./datamodel.sh downloadrpd -O /scratch/103PS4 -SI biainstance -
U<username>
-P
<password>
```

- b. Copy the downloaded Oracle BI Applications release 11.1.1.10.3 PS4 GA repository file to the environment with Oracle Analytics Server. Use the patchrpd.sh command to apply the patch on the Oracle BI Applications release 11.1.1.10.3 PS4 repository file:

```
Command path: <DOMAIN_HOME>/bitools/bin
./patchrpd.sh -C <10.3PS4 RPD> -G <10.3 RPD> -I <Custom
Patch file> -O Merged.rpd -V decision.csv
-U-N -8 -A -S patchpassword
```

For example,

```
./patchrpd.sh -C /scratch/103GA.rpd -G /scratch/103.rpd -I
/scratch/103patch.xml -O /scratch/Merged.rpd -V /scratch/
decision.csv -U -N -8 -A -S <password>
```

Provide passwords when prompted.

 **Note:**

- U is an optional argument that applies default decisions for conflicts automatically so that `patchrpd` can finish successfully. If you don't include this parameter, then `patchrpd` displays a warning and exits if a conflict is detected.
- N is an optional argument that is used to ignore all non-fatal errors. Examples of non-fatal errors are unresolved objects, duplicated objects, and broken or incorrect expressions.
- 8 specifies the UTF-8 encoding.
- A is an optional argument used to skip subset patching and instead apply the patch using the input repository files.
- This example applies `103patch.xml` to the Oracle BI Applications release 11.1.1.10.3 PS4 GA repository, and then generates an output repository called `Merged.rpd` and an output decision file named `decision.csv`. The "Merged" repository file is the "Upgraded" repository file that has the release 11.1.1.10.3 PS4 content and the customizations.

3. Upload the "Upgraded" repository file to the Oracle BI Applications release 11.1.1.10.3 PS4 setup:

- Copy the "Merged" repository file from the Oracle Analytics Server standalone machine to the Oracle BI Applications release 11.1.1.10.3 PS4 setup
- Upload the "Merged" repository file to the instance using the `<DOMAIN_HOME>/bitools/bin` command path. For example,

```
./datamodel.sh uploadrpd -I /scratch/Merged.rpd -SI biainstance -U
<username> -P <password>
```

- Restart the BI services.

4. Verify the Oracle BI Applications release 11.1.1.10.3 PS4 repository file.

- Download the repository file from the environment with the Oracle BI Applications release 11.1.1.10.3 PS4 setup using the `<DOMAIN_HOME>/bitools/bin` command path. For example,

```
./datamodel.sh downloadrpd -O /scratch/BIAPPS103PS4Upgraded.rpd -SI
biainstance -U <username> -P
<password>
```

- Using the [Oracle Analytics Client Tool](#), open the downloaded repository file and verify that the custom changes are present.

For more information on Connecting the Oracle Analytics Server repository (Data model) to an Oracle ADB Data warehouse. See My Oracle Support note Doc ID 2808444.1.

Case 4: Upgrade the Catalog

Use the instructions provided for Case 1: Upgrade the Catalog.

See [Case 1: Upgrade the Catalog](#).

Case 4: Upgrade the JAZN File

Use the instructions provided for Case 1: Upgrade the JAZN File.

See [Case 1: Upgrade the JAZN File](#).