Oracle® Business Intelligence Applications

Installation Guide

11*g* Release 1 (11.1.1.10.2)
E72034-07
September 2018

ORACLE

Oracle Business Intelligence Applications Installation Guide, 11*g* Release 1 (11.1.1.10.2)

E72034-07

Primary Author: Padma Rao

Contributors: Oracle Business Intelligence development, product management, and quality assurance teams.

Contents

4 Performing Post-Installation System Setup Tasks

5 Setting Up Fusion Applications Cloud Data Sources

6 Setting Up Oracle Service Cloud Data Source

7 Setting Up Oracle Taleo Cloud Data Source

8 Deploying the ODI Repository for Non-Oracle Source Databases

A Repository Creation Utility Screens

B Installer Screens Common to All Oracle Fusion Middleware Suites

C Oracle BI Applications Installation and Configuration Screens

D Generating DDL and Assigning Tablespaces to Tables and Indexes

E Integrating Interactive Dashboards and Siebel Operational Applications Data

F Preconfigured Mappings for Siebel System Subject Area

Preface

Oracle Business Intelligence Applications (Oracle BI Applications) is a comprehensive suite of prebuilt solutions that 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 insight that enables more effective actions, decisions, and processes.

Oracle BI Applications is built on Oracle Business Intelligence Suite Enterprise Edition (Oracle BI EE), 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.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

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

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.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

New Features for Oracle BI Applications Installation

In this release of Oracle Business Intelligence Applications (Oracle BI Applications), you can:

- Setup Oracle BI Applications with Oracle Service Cloud source system.
- Setup Oracle Fusion Applications Releases 10, 11, 12, and 13 data sources.
- Use Extensibility features to enhance HR and Payroll attributes in data sources of Fusion Applications 10, 11, 12, and 13.

1

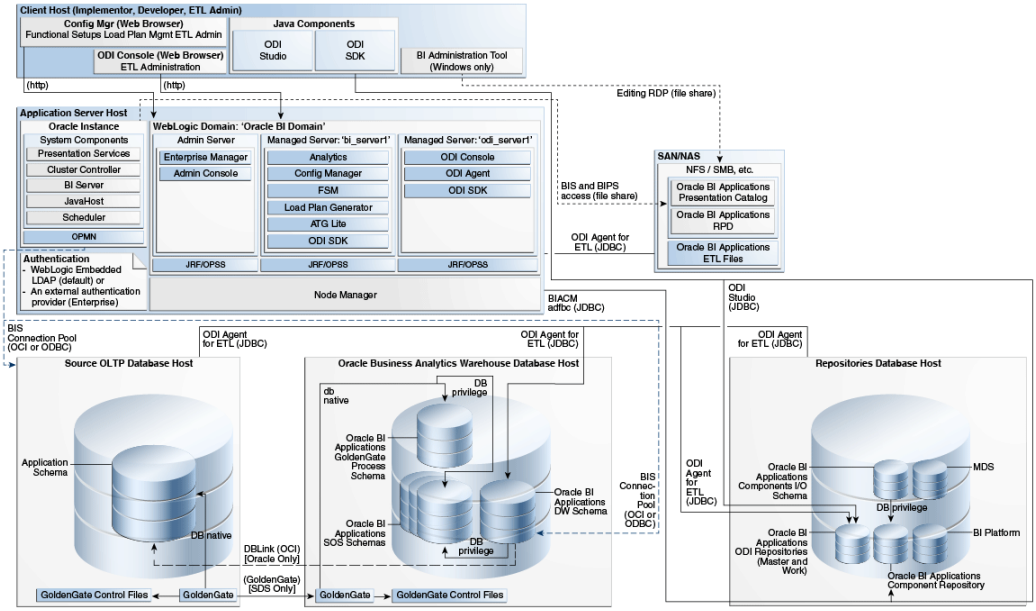
Oracle BI Applications Architecture and Installation Overview

This section provides an overview of the Oracle Business Intelligence Applications (Oracle BI Applications) architecture and installation process.
Topics:

Oracle BI Applications Architecture

Review the Oracle BI Applications deployment architecture, which is comprised of several components and repositories.

Oracle BI Applications Deployment Architecture Diagram



Components Deployed Into Manager Server "bi_server1"

- Oracle Business Intelligence Applications Configuration Manager — This component is a web application that enables you to perform system setups, functionally configure your Oracle BI Applications, and define, generate, run, and monitor load plans.
- Functional Setup Manager (FSM) — This component is a web application used by Configuration Manager for sequenced task implementation and task dependency management.

- Load Plan Generator — This component is a set of jar files used to create load plans in the ODI Repository.
- ATGLite — This component is a J2EE component used by Configuration Manager and FSM.

Components Deployed Into Managed Server "odi_server1"

- ODI Console — This component enables you to control and monitor ETL.
- ODI Agent — This component is a Java EE Agent, which handles schedules and orchestrates sessions.

Oracle BI Applications Repositories

- Oracle Business Analytics Warehouse — The Oracle Business Analytics Warehouse is a unified data repository for all customer-centric data, which supports the analytical requirements of the supported source systems. The Oracle Business Analytics Warehouse is supported only on Oracle Database.
- Oracle Business Intelligence Applications Components Repository (BIACOMP) — This is the repository for Configuration Manager and FSM. It contains load plan definitions as well as Oracle BI Applications product hierarchy, setup objects, such as parameters and domain mappings, and a list of functional tasks. This repository is supported only on Oracle Database.
- Oracle BI Applications I/O Schema — This schema is a mirror schema and is used by all other components to read the Oracle Business Intelligence Applications Components Repository (BIACOMP) schema. It supports read/write of configuration and functional setup data through ETL processes.
- ODI Repository for Oracle BI Applications — This repository contains the Oracle BI Applications-specific prebuilt ETL logic.

Client Tier

As depicted in the figure, the client host shows the Configuration Manager and ODI Console accessed through Web browsers. ODI Studio is installed on a developer client system. For Oracle BI Applications usage, ODI SDK must be installed along with ODI Studio.

Additional Tools

Oracle GoldenGate is an optional tool integrated with Oracle BI Applications. You can use this tool to optimize ETL loads and reduce impact on the source system, using a source-dependent data store.

To deploy Oracle GoldenGate in an Oracle BI Applications environment, see Setup Step: Install Oracle GoldenGate on Source and Target Systems, *Oracle Business Intelligence Applications Administrator's Guide*.

ETL Architecture

To learn about ETL architecture, see About ETL Architecture, *Oracle Business Intelligence Applications ETL Guide*.

Oracle BI Applications Installation Roadmap

Review the high-level roadmap for installing and configuring Oracle BI Applications.

1. Review the Oracle Fusion Middleware Supported System Configurations on Oracle Technology Network.
2. Review preinstallation and deployment requirements.
3. Install prerequisites:
   - Oracle Business Intelligence Enterprise Edition:
     - Software Only Install mode requires WebLogic Server 10.3.6 as a prerequisite.
     - Enterprise Install mode installs WebLogic Server 10.3.5. You must upgrade to WebLogic Server 10.3.6 after installation of Oracle BI Applications is complete.
   - Oracle Data Integrator
4. Create schemas for Oracle BI Applications.

   In this step you run the Oracle Fusion Middleware Repository Creation Utility (RCU) to create the necessary schemas for Oracle BI Applications.
5. Install Oracle BI Applications.

   In this step you run the Business Analytics Applications Suite installer to install the binary files for Oracle BI Applications.
6. Apply Oracle Fusion Middleware Platform patches.
7. Configure Oracle BI Applications.

   This step is the configuration phase of the installation process. In this step you configure Oracle BI Applications with the configuration script.
8. Apply post-installation patches.
9. Perform system setup tasks.

   You perform system setups to complete integration of the Oracle BI Applications components and to ready the system for functional configurations and data loads.
10. Configure non-Oracle source databases.

    This step is required only if your source database is not Oracle Database.
11. If you are deploying Oracle Fusion Applications Cloud source system data, then follow the steps in Setting Up Fusion Applications Cloud Data Sources.
12. If you are deploying Key Flex Fields for Financials, then before you execute this Load Plan you must follow the steps in Setting Up Key Flex Fields for Financials Fusion Applications Source Data.

2

Preinstallation and Deployment Requirements for Oracle BI Applications

This section describes preinstallation and deployment requirements for Oracle Business Intelligence Applications (Oracle BI Applications).

Topics:

General Guidelines for Setting Up Databases for Oracle BI Applications

These guidelines help you set up the data warehouse physical database and explain why a separate database is necessary for Oracle BI Applications.

Guidelines for Setting Up Oracle Business Analytics Warehouse Databases

These guidelines help you set up the data warehouse physical database for performance and growth.

- Allocate around 50 to 70 percent of the total available server memory to the database, assuming no other application is running on the same server.
- At a minimum, separate the data and index tablespaces. Create more tablespaces to separate heavily used tables and their indexes.
- Oracle recommends using 8k block size for Oracle warehouses.
- If you are using multiple disk storage systems, stripe the tablespace containers and files across as many disks as possible.
- Raw devices for tablespaces provide better performance as compared to cooked file systems.
- RAID-5 is known to give a good balance of performance and availability.

Why Use a Separate Database for the Oracle Business Analytics Warehouse?

Although it is technically possible to put the Oracle Business Analytics Warehouse in the same database as the transactional database, it is not recommended for

performance reasons. The transactional database is structured as an online transaction processing (OLTP) database, whereas the Oracle Business Analytics Warehouse is structured as an online analytical processing (OLAP) database, each optimized for its own purpose.

The reasons for not combining the two databases are:

- ETL is configured to maximize hardware resources; and, therefore, the warehouse should not share any resources with any other projects.
- The analytical queries interfere with normal use of the transactional database, which is entering and managing individual transactions.
- The data in a transactional database is normalized for update efficiency. Transactional queries join several normalized tables and will be slow (as opposed to pre-joined, de-normalized analytical tables).
- Historical data cannot be purged from a transactional database, even if not required for current transaction processing, because you need it for analysis. (By contrast, the analytical database is the warehouse for historical as well as current data.) This causes the transactional database to further slow down.
- Transactional databases are tuned for one specific application, and it is not productive to use these separate transactional databases for analytical queries that usually span more than one functional application.
- The analytical database can be specifically tuned for the analytical queries and Extract-Transform-Load (ETL) processing. These are quite different from transactional database requirements.

Oracle-Specific Database Guidelines for Oracle Business Analytics Warehouse

These guidelines help you to optimize Oracle database performance and configure Oracle Business Analytics Warehouse on Oracle databases.

Topics:

General Guidelines for Oracle Databases

These additional suggestions help you to optimize performance for Oracle databases used for Oracle Business Analytics Warehouse.

- Oracle BI Applications on Oracle databases support only binary sorting. If you are running an Oracle client, do one of the following:
  - Set the NLS_SORT parameter to BINARY.
  - Choose a NLS_LANG setting that includes binary.

  These settings are required for adequate performance from the dedicated Web client.
- It is recommended that you gather workload system statistics.

- To increase data throughput between Oracle BI Server and the Oracle database, change SDU and TDU settings in listener.ora. The default is 2 KB and can be increased to 8 KB.
- On the server side, edit the listener.ora file. Under the particular SID_LIST entry, modify SID_DESC as follows:

```
SID_LIST_LISTENER =
   SID_LIST =
      SID_DESC = (SDU=16384)(TDU=16384)
         ORACLE_HOME = /.....)
         SID_NAME = SOLAP)
   )
)
```

- Set the number of log file groups to 4.
- On the client side, edit the tnsnames.ora file. Modify the TNS alias by adding SDU= and TDU= as follows:

```
myhost_orcl.world=
   DESCRIPTION=(SDU=16384)(TDU=16384)
   ADDRESS = (PROTOCOL = TCP)(HOST=myhost)(PORT=1521))
CONNECT_DATA=(SID=ORCL))
```

Guidelines for Using Oracle Template Files

To configure the Oracle Business Analytics Warehouse on Oracle databases more easily, refer to the parameter template file `init11gR2_template.ora` file or `init11gR2_Exadata_template.ora`, which are stored in `\`*`ORACLE_HOME`*`\biapps\etl`.

The parameter template file provides parameter guidelines based on the cost-based optimizer for Oracle 11gR2. Use these guidelines as a starting point. You will need to make changes based on your specific database sizes, data shape, server size (CPU and memory), and type of storage. The database administrator should make changes to the settings based on performance monitoring and tuning.

Copy the appropriate template file into your *`ORACLE_HOME`*`/dbs` directory. Then, review the recommendations in the template file, and make the changes based on your specific database configuration. The database administrator should make changes to the settings based on performance monitoring and tuning considerations.

> **Note:**
>
> The NLS_LENGTH_SEMANTICS parameter enables you to define byte- or character-length semantics. Oracle BI Applications supports BYTE and CHAR values for this parameter. If you are using MLS characters, then you can add this parameter to the parameter template file for your database version (that is, the `init`*`DB_version`*`.ora` file).

3

Installing and Setting Up Oracle BI Applications

Follow these instructions for installing and setting up Oracle Business Intelligence Applications (Oracle BI Applications).
Topics:

Hardware Requirements

Here is some information regarding the hardware requirements for Oracle BI Applications.

- 10-12 GB of free memory and 10 GB Swap Space for run-time requirements.
- 35 GB free disk space and 10 GB Swap Space to run the Business Analytics Applications Suite installer. This disk space will be released after the installer finishes.

For additional information about hardware requirements for Oracle BI Enterprise Edition (Oracle BI EE) and Oracle Data Integrator (ODI), see Oracle Fusion Middleware Supported System Configurations on Oracle Technology Network.

Installation Prerequisites for Oracle BI Applications

You must install certain components before you can install Oracle BI Applications.

For the specific versions of the prerequisite products supported for this release of Oracle BI Applications, see Oracle Fusion Middleware Supported System Configurations on Oracle Technology Network.

> **Note:**
>
> When you run the Oracle Business Intelligence 11g installer, select the **Software Only Install** option. Ensure that you install WebLogic Server 10.3.6 before running the Oracle BI EE installer.

Topics:

- Installing Oracle BI Enterprise Edition 11g
- Installing Oracle Data Integrator

Installing JDK

The Business Analytics Applications Suite installer, which you run to install Oracle BI Applications, requires JDK version 1.7.x.

Oracle BI EE, WebLogic Server, and ODI also require JDK. For the supported versions, see Oracle Fusion Middleware Supported System Configurations on Oracle Technology Network. Make sure the version of JDK you install meets the requirements for all products.

> **Note:**
>
> You must use the 64-bit version of JDK or to install on 64-bit systems. On Windows, the location of the JDK must be on the same drive as the installers.

Installing Oracle WebLogic Server

Oracle BI Applications requires Oracle WebLogic Server 11g Release 1 (10.3.6).

If you choose to install Oracle BI EE using the Software Only Install option, then you must install Oracle WebLogic Server 10.3.6. See Installation Overview in *Installing and Configuring Oracle WebLogic Server and Coherence* 11*g* Release 1 (10.3.6).

> **Note:**
>
> You do not need to run Quickstart at the end of the Weblogic Server installation.

Running Oracle Fusion Middleware Repository Creation Utility

Before installing Oracle BI EE, you must run the Oracle Fusion Middleware Repository Creation Utility (RCU) to create the necessary schemas.

In the Select Components screen of the Oracle Fusion Middleware Repository Creation Utility, make sure you select the options to install the following schemas:

- Metadata Services (appears under AS Common Schemas)

  Make a note of the Metadata Services schema owner name and password. You will need these values when you run the `configApps.bat` or `configApps.sh` file to set up Oracle BI Applications.

- Business Intelligence Platform (appears under Oracle Business Intelligence)

> **Caution:**
>
> Don't select the option to install the ODI schema. You will install an Oracle BI Applications-specific ODI schema when you run the Business Analytics Applications Suite RCU.

Oracle BI Enterprise Edition 11*g* Installation

Oracle BI Applications requires an installation of Oracle BI Enterprise Edition 11*g* deployed on Oracle WebLogic Server 10.3.6. (Oracle WebLogic Server 10.3.5 is not supported). Ensure that you install Oracle WebLogic Server 10.3.6 before running the Oracle BI EE installer.

When you run the Oracle Business Intelligence 11g installer, select the Software Only Install option.

To install Oracle WebLogic Server, see Installation Overview in *Installing and Configuring Oracle WebLogic Server and Coherence*.

To install Oracle BI EE, see Installation Overview in *Installing and Configuring Oracle Business Intelligence*.

Note these points:

- Oracle BI EE must be deployed on Oracle WebLogic Server. Websphere isn't supported for Oracle BI Applications.
- The BI Domain should not be extended or scaled out before running the Business Analytics Applications Suite installer.
- Installing Oracle BI EE using the Simple Install mode isn't supported.
- Installing Oracle BI EE on Windows 32-bit and Linux 32-bit isn't supported for Oracle BI Applications.

Installing Oracle Data Integrator

Oracle BI Applications requires an installation of Oracle Data Integrator 11*g*.

For the specific version of ODI that's supported for this release of Oracle BI Applications, see Oracle Fusion Middleware Supported System Configurations on Oracle Technology Network. .

To install ODI, see Installation Overview for Oracle Data Integrator in *Installing and Configuring Oracle Data Integrator*.

Note these points:

- Install the software only and do not perform any other configuration operation.
- On the ODI installer Welcome screen, ignore the message regarding creation of the ODI Repository. You will create the ODI Repository for Oracle BI Applications later when you run the Business Analytics Applications Suite RCU.
- On the Select Installation Type screen, select all the components under Java EE Installation, that is, **Java EE Agent, ODI Console**, and **Public Web Service**.

- On the Select Installation Type screen, if you also choose to install ODI Studio, then you must also select the **ODI SDK** option.
- On the Specify Installation Locations screen, enter the Middleware Home where Oracle BI EE is installed. The installation of ODI in other locations is not supported for Oracle BI Applications.
- If you chose to install ODI Studio, then on the Repository Configuration screen, you must select the **Skip Repository Configuration** option.

The ODI installer is a generic installer. To launch the installer, use one of these commands:

Platform	Command

Windows	`setup.exe -jreLoc <location of jdk>`
	For example:
	`setup.exe -jreLoc C:\jdk`
	For information about the JDK requirements, see Installing JDK.

UNIX and Linux	`./runInstaller -jreLoc <location of jdk>`

Installing and Configuring Oracle BI Applications

Use these instructions to install and configure Oracle BI Applications.

You must perform the following procedures in the order they are listed:

- Creating Database Instances for Schemas and Repositories
- Creating Schemas Using Business Analytics Applications Suite RCU
- Installing Oracle BI Applications Using the Business Analytics Applications Suite Installer
- Applying Platform Patches
- Updating ATGLite
- Updating FSM
- Updating BIACM
- Oracle Business Intelligence Configuration
- Configuring Oracle BI Applications
- How to Start the BI and Oracle Data Integrator Managed Servers
- Installing ODI Studio
- Applying the ODI Studio Patch
- Copying Source Files
- Configuring High Availability in Oracle Business Intelligence Applications
- Next Steps

Database Instances for Schemas and Repositories

Before you run the Business Analytics Applications Suite RCU and installer, you must create database instances to hold the following.

- Oracle Business Analytics Warehouse schema
- Oracle BI Applications Components Repository (for Oracle BI Applications Configuration Manager and Functional Setup Manager (FSM))
- ODI Repository for Oracle BI Applications (includes Master and Work repositories)

Note these points:

- For this release of Oracle BI Applications, the following components are supported only on Oracle Database Enterprise Edition:
  - Oracle Business Analytics Warehouse
  - Oracle BI Applications Components Repository (BIACOMP)
  - ODI Repository for Oracle BI Applications
- To identify the specific version of Oracle Database Enterprise Edition supported for this release of Oracle BI Applications, see Oracle Fusion Middleware Supported System Configurations on Oracle Technology Network.
- Oracle Database Enterprise Edition must be configured with UNICODE.
- The Oracle Business Analytics Warehouse, Oracle BI Applications Components Repository (BIACOMP), and ODI Repository can be installed on different database servers.
- The ODI Master and Work repositories are installed into the same schema.
- Review Guidelines for Setting Up Oracle Business Analytics Warehouse Databases for database requirements for Oracle Business Analytics Warehouse.

Creating Schemas Using Business Analytics Applications Suite RCU

You must run the Business Analytics Applications Suite RCU to create schemas for Oracle Business Analytics Warehouse, Oracle BI Applications Components, and ODI Repository for Oracle BI Applications.

Before you run the Business Analytics Applications Suite RCU, perform these prerequisite tasks:

- Unzip the downloaded RCU .zip file on Windows systems into a directory that does not have spaces in the directory path.
- Copy the .dmp files for each schema to a directory with the global write access on the appropriate database servers to create the required schemas. Note that the RCU uses .dmp files to create the schemas and writes log files to this directory. You can locate the .dmp files in `BIA_RCU_HOME/rcu/integration/biapps/schema`.
- Create schemas from the RCU on Oracle databases by logging in as SYSDBA. You must possess the DBA privilege; for example, you should login as user `SYS` with the SYSDBA role selected.
- Run RCU multiple times, once for each database connection to create schemas on different databases, because the database connections are different for the different database servers.
- Complete these steps before creating schemas using RCU if you have Oracle Database Enterprise Edition with the Partitioning option enabled and you want to use the database partitions:

1. Unzip the following RCU dump files:

   ```
   ../rcu/integration/biapps/schema/obia_comp.dmp
   ../rcu/integration/biapps/schema/obia_odi.dmp
   ../rcu/integration/biapps/schema/obia.dmp
   ../rcu/integration/biapps/schema/obia_partitions.dmp
   ```

2. Remove the obia.dmp file, which is a non-partition dump file, from the following location:

   ```
   ../rcu/integration/biapps/schema
   ```

To create Oracle BI Applications schemas using the Business Analytics Applications Suite RCU:

1. Access the `bin` directory in the `BIA_RCU_HOME` folder.
2. Start RCU, as follows:
   - UNIX:

     ```
     ./rcu
     ```

   - Windows:

     ```
     rcu.bat
     ```

3. On the Welcome screen, click **Next**.
4. On the Create Repository screen, select **Create**, and then click **Next**.
5. On the Database Connection Details screen, specify the connection details for the database in which you want to store the schemas. Note that you must possess the DBA privilege and be logged in as `SYSDBA` (for example, as user `SYS`).

   Specify these database connection details:

Field Name	Action
Database Type	Select **Oracle Database**. Other database types are not supported in this release.
Host Name	Specify the fully qualified host name of the system hosting the database. For example, `host12345.example.com`
Port	Specify the port number over which the database communicates. The default port number for an Oracle database is 1521.
Service Name	Specify the service name for the database. Typically, the service name is the same as the global database name.
Username	Specify the user name for the database. The default user name is SYS. The user must have DBA or SYSDBA privileges.
Password	Specify the password for the username specified in the Username field.
Role	Select **SYSDBA**.

6. Click **Next** to display the Select Components screen.
7. On the Select Components screen, near the top of the dialog, select **Create a new Prefix**.

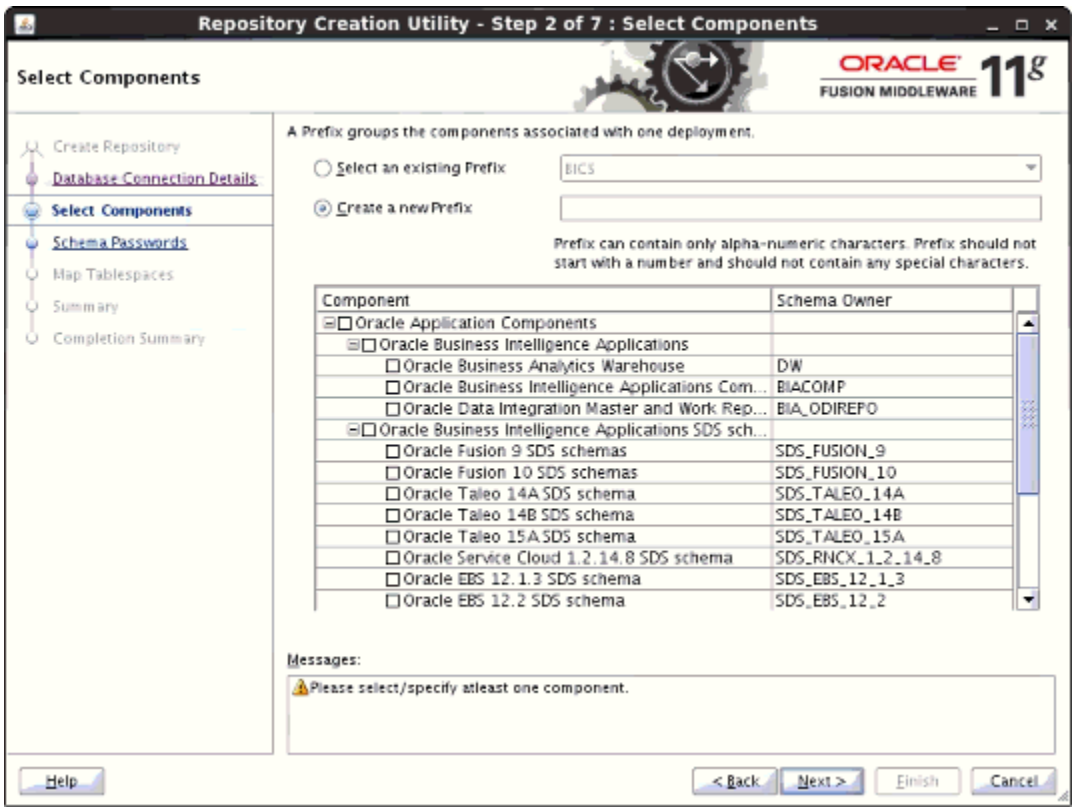
   The default prefix is DEV. You can change the prefix.

RCU automatically creates the schema owner (schema name) in the format `prefix_schemaname`.

Select these options:

Schema Option	Default Schema Owner
Oracle Business Analytics Warehouse	<prefix>_DW (required for all deployments).
Oracle Business Applications Components	<prefix>_BIACOMP (required for all deployments). When you select the Oracle BI Applications Components Repository (BICOMP), RCU creates an additional schema, named BIACM_IO. Do not modify or delete this schema. It is required for metadata access by the different Oracle BI Applications components.
ODI Master and Work Repository	<prefix>_BIA_ODIREPO (required for all deployments).

If you are deploying cloud data sources, then select the option for the applicable Oracle BI Applications SDS schemas as seen in the following image. RCU creates the schemas for the selected cloud source systems.



8. Click **Next** to display the Schema Passwords screen.
9. On the Schema Passwords screen, specify and confirm a password for the schemas, then click **Next** to proceed to the Custom Variables screen.

> **Note:**
>
> The RCU uses .dmp files to create the required schemas. Before you perform the action in the Custom Variables screen, you must copy the .dmp files for each schema to a directory with global write access on the appropriate database server host. (RCU writes log files to this directory). The .dmp files are located in `BIA_RCU_HOME\rcu\integration\biapps\schema`.

10. In the Value field in the Custom Variables screen, for each schema enter the directory path of the folder on the database server that contains the .dmp file.

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

    Click **Next** to proceed to the Map Tablespaces screen.

11. On the Map Tablespaces screen, which displays the default and temporary tablespaces for the schemas:

    a. Leave the default values for Default Tablespace and Temp Tablespace for each schema.

    b. Set the temporary tablespace size for the data warehouse tablespaces according to the values in the following table:

       i. Click **Manage Tablespaces**.

       ii. In the left-side navigation panel, select the appropriate tablespace name.

       iii. In the main window, select the tablespace name under the Datafiles heading.

       iv. Click the **Edit** icon to display the Datafile dialog.

       v. In the Edit Datafile dialog, set the temporary tablespace size according to this table:

Tablespace	Value
<prefix>_DW_DATA	Size: 20 GB Maximum Size: Unlimited Leave the remaining default values.
<prefix>_DW_IDX	Size: 5 GB Maximum Size: Unlimited Leave the remaining default values.
<prefix>_DW_STG	Size: 10 GB Maximum Size: Unlimited Leave the remaining default values.
<prefix>_DW_TEMP	Size: 15 GB Maximum Size: Unlimited Leave the remaining default values.

    Click **OK** to exit the Edit Datafile dialog. Then, click **Next** in the Map Tablespaces screen, and click **OK** in the message dialog to create the tablespaces for the schemas.

12. On the Summary screen, click **Create** to start the schema creation process.

When the schemas are created with no errors, the Completion Summary screen is displayed.

13. On the Completion Summary screen, click **Close**.

Installing Oracle BI Applications Using the Business Analytics Applications Suite Installer

Run the Business Analytics Applications Suite installer to install Oracle BI Applications. This installer runs in software-only mode. You must run the Business Analytics Applications Suite installer on the system where you ran the Oracle BI EE installer. All files are installed to disk in the Oracle Home for BI directory. Note that you must perform post-installation steps to configure Oracle BI Applications in a later procedure.

Prerequisite to Running the Business Analytics Applications Suite Installer:

- The installer is a generic installer and requires JDK to be installed. See Installing JDK.
- 35 GB free disk space is required to run the Business Analytics Applications Suite installer. This disk space will be released after the installer finishes.

1. Launch the Business Analytics Applications Suite installer using the command for your operating system.

   The Business Analytics Applications Suite installer displays the Welcome screen.

Platform	Command

Windows	In a command prompt:
	`setup.exe -jreLoc <Drive:\...\jdk location>`
	Where `jdk location` is the directory that contains the bin folder.
	For example:
	`setup.exe -jreLoc C:\jdk`

UNIX and Linux	`./runInstaller -jreLoc <jdk location>`

> **Note:**
>
> If you are running the installer on a Linux system that does not have the file /etc/oraInst.loc, the Specify Inventory Location screen displays.

2. Click **Next** to display the Prerequisite Checks screen.

   This screen analyzes the host computer to ensure that specific operating system prerequisites have been met. If any of the prerequisite checks fail, then an error message appears in the bottom portion of the screen. Fix the error and click **Retry** to try again. If you want to ignore the error or warning messages and continue with the installation, click **Continue**. Click **Abort** to stop prerequisite checking for all components.

3. Click **Next** to display the Specify Installation Location screen.

4. In the Specify Installation Location screen, specify the details of the Oracle BI EE installation:

Field	Action
Oracle Middleware Home	Specify the path to the directory for an existing Oracle Middleware home where Oracle BI EE has been installed. If you do not know the location of the directory, click **Browse** to locate the directory on your system.
Oracle Home Directory	Specify the Oracle Home for BI; for example, Oracle_BI1. Do not specify any other Oracle home or choose to create a new one. The Oracle Home for BI directory is where the software binary files for Oracle BI Applications will be installed.

If you are installing on a Windows operating system, make sure that the directory paths are valid and do not contain double back-slashes (\\).

5. Click **Next** to display the Summary screen.
6. Review the summary information, and click **Next** to start the installation.

   The installer installs the Oracle BI Applications folders and files in the Oracle Home for BI directory.

> **Note:**
>
> Even when the progress bar on the installer reports 100% complete, wait until the **Finish** button is displayed.

7. Click **Finish**.

Applying the Oracle Fusion Middleware Platform Patch

Apply the Oracle Fusion Middleware patch.

To apply theOracle Fusion Middleware platform patch:

1. Download Oracle Fusion Middleware platform patches for Oracle BI Applications for your operating system from the Oracle Business Intelligence Applications 11.1.1.10.2 media pack on Oracle Software Delivery Cloud.

   Download all parts.

2. Extract all .zip files into the same Patch Home directory.

   Extract the contents of the downloaded .zip files containing the patches into the same directory, for example, `C:\patches` or *`PATCH_HOME`*`/patches`. The directory structure of the extracted contents is not `patches4biapps/dist/ps7st`. The patches are contained in folders: biappsshiphome, odi, weblogic and oracle_common. You don't have to unzip the individual patches.

3. Update the parameter input file (`apply_patches_import.txt`) to reflect the paths as specified in the text file:

   a. Create a writable directory where logs and temporary patch files will be stored. In the `apply_patches_import.txt` file, set the `WORKDIR=` variable to point to the path for this directory.

   b. Open `apply_patches_import.txt`, which is located in the *`ORACLE_HOME`*`/biapps/tools/bin` directory (use backslashes for Windows).

c. Specify these directory paths:

Directory	Path
JAVA_HOME	Path of the JDK you installed for your platform.
INVENTORY_LOC	Path of the Oracle/Inventory directory. For example: `C:\Program Files\Oracle\Inventory`.
ORACLE_HOME	Path of the Oracle Home for BI directory.
MW_HOME	Path of the Oracle Middleware Home directory.
COMMON_ORACLE_HOME	Path of the oracle_common directory, which is under the Middleware Home directory.
WL_HOME	Path of the Oracle WebLogic Server Home directory.
ODI_HOME	Path of the ODI Home directory.

WINDOWS_UNZIP_TOOL_EXE	If the platform is Windows, then specify an unzip tool EXE file with the complete path. The supported unzip tools are Winzip command line and 7-Zip command line.
	For example, for the Winzip tool:
	`c:{PathSep}Program Files{PathSep}WinZip{PathSep}wzunzip.exe`
	For example, for the 7-Zip tool:
	`c:{PathSep}Program Files{PathSep}7-Zip{PathSep}7z.exe`

WORKDIR	Path of a writable directory where logs and temporary patch files are stored.
PATCH_ROOT_DIR	Path of the parent patch directory. After the zip file is extracted to a location, the following directories are created: `biappsshiphome`,`odi` , `weblogic`, etc. (some or all the directories).

4. To apply the patch, run this command from *`ORACLE_HOME`*`/perl/bin`.

```
"$ ORACLE_HOME/perl/bin/perl"
 ORACLE_HOME/biapps/tools/bin/APPLY_PATCHES.pl ORACLE_HOME/biapps/tools/bin/
apply_patches_import.txt
```

In case you run into issues during the applying patches procedure, for example, `APPLY_PATCHES.pl` and you are unable to identify the patches directory path on some windows platform, then you can manually apply the patches. For example, after all the patches in the zip file are unzipped to `C:\work\patching\patches` directory, use the following commands:

- `C:\work\mw333\Oracle_BI1\OPatch\opatch napply C:\work \patching\patches\biappsshiphome\generic -silent -oh C: \work\mw333\Oracle_BI1 -jdk C:\work\mw333\Oracle_BI1\jdk > C:\work\patching\biappshiphome_generic_patches.log`

- `C:\work\mw333\Oracle_BI1\OPatch\opatch napply C:\work \patching\patches\biappsshiphome\win64 -silent -oh C:\work \mw333\Oracle_BI1 -jdk C:\work\mw333\Oracle_BI1\jdk > C: \work\patching\biappshiphome_win64_patches.log`
- `C:\work\mw333\oracle_common\OPatch\opatch napply C:\work \patching\patches\oracle_common\generic -silent -oh C: \work\mw333\oracle_common -jdk C:\work \mw333\Oracle_BI1\jdk > C:\work\patching \oracle_common_generic_patches.log`
- `C:\work\mw333\Oracle_ODI1\OPatch\opatch napply C:\work \patching\patches\odi\generic -silent -oh C:\work \mw333\Oracle_ODI1 -jdk C:\work\mw333\Oracle_BI1\jdk > C: \work\patching\odi_generic_patches.log`

On other platforms, replace *win64* and command path with the corresponding ones.

5. Apply Weblogic patches manually using the `suwrapper` command line utility.

   Perform this step after executing the `APPLY_PATCH.pl` script and before configuring BI Tech. Apply the Weblogic patches on all OS platforms only if it failed to apply in the previous steps.

   Complete these steps:

   a. Create a folder in `<MW_HOME>\utils\bsu\cache_dir` if it does not exist.

   b. Unzip the Weblogic patch from the patch location to the `<MW_HOME>\utils \bsu\cache_dir` directory.

   > **Note:**
   >
   > Ensure that the `<MW_HOME>\utils\bsu\cache_dir` folder has only files (`jar`, `xml`, and `ReadMe`) that you unzipped and no folders.

   c. Create new temp work location such as `<SUWRAPPER_TEMP>`.

   d. Unzip the `suwrapper` utility from the patch location to the temporary work location `C:\work\patching\suwrapper`.

   e. Execute the patching utility jar to apply the patch. Use the following command:

   ```
   <MW_HOME>\Oracle_BI1\jdk\bin\java -jar <SUWRAPPER_TEMP>\bsu-wrapper.jar -
   prod_dir=<MW_HOME>\wlserver_10.3 -install -patchlist=BUNQ -bsu_home=<MW_HOME>
   \utils\bsu -meta=<SUWRAPPER_TEMP>\suw_metadata.txt -verbose >
   <SUWRAPPER_TEMP>\weblogic_patching.log
   ```

> **Note:**
>
> The param in the above command `-patchlist=BUNQ` is the comma-separated list of Weblogic patches of the `.jar` file name in the `<MW_HOME>\utils\bsu\cache_dir`. In this case there is only one `BUNQ.jar` file, hence the name is provided in the `-patchlist` param. If there are more then one jar file, then the param value can be such as `patchlist=BUNQ,HYCK,PBQA`. If the execution complains for dependent patch, then ensure that the dependent patch name is the first in the comma-separated list of `-patchlist` param.

f. Verify the patching logs. The last param is the location of the generated Weblogic patching log, `C:\work\patching\weblogic_patching.log`.

6. Confirm that all patches have been applied successfully by reviewing these log files in the directory specified by WORDIR.
   - `final_patching_report.log` (summary of patch application)
   - `biappshiphome_generic_patches.log`
   - `biappshiphome_<OS specific>_patches.log`
   - `odi_generic_patches.log`
   - `oracle_common_generic_patches.log`
   - `weblogic_patching.log`

Updating ATGLite

Upgrade ATGLite schemas to Release 11.1.1.9.0 before configuring Oracle BI Applications. Use these instructions to update the ATGLite data in the Oracle Business Intelligence Applications Components Repository (BIACOMP) schema.

To update the ATGLite data:

1. Start the Patch Set Assistant (`./psa` or `psa.bat`) from the `bin` directory in the *ORACLE_HOME*, based on the operating system.
2. Click **Next** in the Welcome screen.
3. On the Select Component page, select **ATGPF Lite**, which selects the child option, **ATGLITE schema**, then click **Next**.
4. On the Prerequisites page, select **Database backup completed** and **Database version is certified by Oracle for Fusion Middleware upgrade**, then click **Next**.
5. On the ATGLite Schema page, follow the instructions at the top of the page to enter the details for the database containing the ATGLite schema, then click **Next**.
6. View the Upgrade Summary, then click **Upgrade**.
7. Review the information on the Upgrade Success page, then click **Close**.

Updating FSM

Upgrade FSM schemas to Release 11.1.1.9.0 before configuring Oracle BI Applications. Use these instructions to update the FSM data in the Oracle Business Intelligence Applications Components Repository (BIACOMP) schema.

To update the FSM data:

1. Start the Patch Set Assistant (`psa` or `psa.bat`) from the `bin` directory in the *ORACLE_HOME*, based on the operating system.
2. Click **Next** in the Welcome screen.
3. On the Select Component page, select **Oracle Fusion Functional Setup Manager Lite**, which selects the child option, **FSM schema**, then click **Next**.
4. On the Prerequisites page, select **Database backup completed** and **Database version is certified by Oracle for Fusion Middleware upgrade**, then click **Next**.
5. On the FSM Schema page, follow the instructions at the top of the page to enter the details for the database containing the FSM schema, then click **Next**.
6. Verify that the examination process is successful, then click **Next**.
7. View the Upgrade Summary, then click **Upgrade**.
8. Review the information on the Upgrade Success page, then click **Close**.

Updating BIACM

Upgrade BIACM schemas to Release 11.1.1.10.2 before configuring Oracle BI Applications. Use these instructions to update the BIACM data in the Oracle Business Intelligence Applications Components Repository (BIACOMP) schema.

To update the BIACM data:

1. Start the Patch Set Assistant (`psa` or `psa.bat`) from the `bin` directory in the *ORACLE_HOME*, based on the operating system.
2. Click **Next** in the Welcome page.
3. On the Select Component page, select `BIACM`, then click **Next**.
4. On the Prerequisites page, select **Database backup completed** and **Database version is certified by Oracle for Fusion Middleware upgrade**, then click **Next**.
5. On the BIACM Schema page, follow the instructions at the top of the page to enter the details for the database containing the BIACM schema, then click **Next**.
6. Verify that the examination process is successful, then click **Next**.
7. View the Upgrade Summary, then click **Upgrade**.
8. Review the information on the Upgrade Success page, then click **Close**.

Oracle Business Intelligence Configuration

You configure the BI Domain by running the `config.bat` or `config.sh` file.

The `config.bat` and `config.sh` files are located in *`ORACLE_HOME`*`/bin`.

When running the script, do these tasks:

- At path `/app/oracle/fmw/Oracle_BI1/bin`, run the `./config.sh` command.
- On the Configure Components screen, for Oracle BI Applications, you must select the BI Applications Components option.

> **Note:**
>
> Don't scale out the BI Domain.

Configuring Oracle BI Applications

You'll need to run the `configApps.bat` or `configApps.sh` file to extend the BI Domain to deploy Oracle BI Applications and to configure the components.

During this phase, these key configurations occur:

- Configuration Manager, FSM, ODI Java EE Agent, ODI Console, and Load Plan Generator are deployed into WebLogic Server.
- Component wiring is performed.
- AnOracle BI Applications Administrator User (with full access to Configuration Manager and access to ODI with the Supervisor role) is created in WebLogic Server embedded LDAP.
- The ODI for Oracle BI Applications is configured and set to use external authentication (that is, authentication against the WebLogic Server embedded LDAP).

The `configApps.bat` and `configApps.sh` files are located in *`ORACLE_HOME`*`/bin`.

1. Before running the configApps process, ensure that WLS Admin Server, Node Manager, and BI Services are running.
2. Start the configuration utility from the bin directory in the Oracle home (default folder name is Oracle_BI1), based on the operating system:

   UNIX commands:

   `cd` *`ORACLE_HOME`*`/bin`

   `./configApps.sh`

   Windows commands:

   `cd` *`ORACLE_HOME`*`\bin`

   `configApps.bat`
3. On the Welcome screen, click **Next**.
4. On the Prerequisite Checks screen, after the prerequisite checks conclude with no errors, click **Next**.

   If an error message appears, fix the error and then click **Retry** to run the prerequisite check again (recommended). Repeat this until all prerequisite checks conclude with no errors. To stop the configuration process while you fix a prerequisite error, click **Abort**. To ignore an error or warning message, and continue with the configuration process, click **Continue** (not recommended).

> **Note:**
>
> The configuration might not function normally if you continue without resolving the issue that caused an error or warning message during the prerequisite checks.

5. On the Extend BI Domain screen, specify these details:

Field	Description
Host Name	The host name of the computer on which the WebLogic Server domain exists. This field is read-only.
Port	Specify the port number over which the WebLogic Server domain communicates. The default is 7001.
User Name	Specify the user name for logging into the WebLogic Server.
User Password	Specify the password for logging into the WebLogic Server.

Click **Next**.

6. The Specify Installation Location screen displays this information:

Field	Description
Middleware Home	Specify the path to the directory for an existing Oracle Middleware Home where Oracle BI EE has been installed. This field is read-only.
Oracle Home	The Oracle Home for BI, which is the location where Oracle BI EE, and Oracle BI Applications files are installed. This field is read-only.
WebLogic Server Home	The directory name for the WebLogic Server. The value in this field is read-only and is the host name you specified in the Middleware Home field.
Domain Home	The home directory for the domain associated with the Oracle Business Intelligence system. This field is read-only.
Instance Home	The path to the Oracle Instance directory. The installer installs component configuration files and runtime processes in the Oracle Instance directory. Runtime components write to this directory only. The directory that you identify for the Oracle Instance can be located anywhere on your system, and does not need to be inside the Oracle Middleware Home. This field is read-only.
Instance Name	The name of the Oracle Business Intelligence instance. By default, the location is based on the value in the Instance Home field. This directory is commonly referred to as ORACLE_INSTANCE. The value in this field is read-only.

Click **Next**.

7. On the Configure Components screen, to deploy Oracle BI Applications, select **BI Application Components**.

> **Note:**
>
> If you are deploying any cloud source systems, then select the check box for the applicable **Cloud Extender Sources SDS**.

Click **Next**.

8. On the RPD Encryption Password screen, specify these details:

Field	Description
RPD Password	Specify the password used to encrypt the repository.
Confirm RPD Password	Confirm the password used to encrypt the repository.

Click **Next**.

9. On the BI Applications Administrator User screen, specify these details:

Field	Description
Username	Specify a user name for the Oracle BI Applications Administrator. Do not enter Administrator, Admin, Sadmin, or Supervisor in upper-case, lower-case, or mixed-case letters. These user names are reserved. Also, do not use the WebLogic Server administrator user name.
Password	Specify a password for the Oracle BI Applications Administrator.
Confirm Password	Confirm the password.

Note these credentials because this user will be used to perform system setups and is the user that is used for communications between the Configuration Manager and ODI. This user has full access privileges in Configuration Manager and access to ODI with the Supervisor role.

Click **Next**.

10. On the MDS Schema screen, specify these details:

Field	Description
Database Type	The type of database that hosts the MDS schema. The only supported database type is Oracle.
Connect String	The connect string used to access the MDS schema.
MDS Schema Username	The schema name for the MDS schema.
MDS Schema Password	The password for the MDS schema.

Note: The values for user name and password must match the values you entered when you ran the Oracle Fusion Middleware Repository Creation Utility in Running Fusion Middleware RCU.

Click **Next**.

11. On the Oracle BI Applications Components Repository Schema screen, specify these details:

Field	Description
Database Type	Select the type of database that hosts the Oracle BI Applications Components Repository (BICOMP) schema. The only supported database type is Oracle.
Connect String	Specify the connect string used to access the Oracle BI Applications Components Repository (BICOMP) schema. Use the format: *host:port:service_name*
BIA Components Repository Schema Username	Specify the schema name for the Oracle BI Applications Components Repository (BICOMP) schema.
BIA Components Repository Schema Password	Specify the password for the Oracle BI Applications Components Repository (BICOMP) schema.

Click **Next**.

12. On the Business Analytics Warehouse Schema screen, specify these details:

Field	Description
Database Type	Specify the type of database that hosts the Business Analytics Warehouse schema. The only supported database type is Oracle.
Connect String	Specify the connect string used to access the Business Analytics Warehouse schema. Use the format: *host:port:service_name*
Business Analytics Warehouse Schema Username	Specify the schema name for the Business Analytics Warehouse schema.
Business Analytics Warehouse Schema Password	Specify the password for the Business Analytics Warehouse schema.

Click **Next**.

13. On the BI Applications ODI Repository Schema screen, specify these details:

Field	Description
Database Type	Specify the type of database that hosts the ODI Repository schema. The only supported database type is Oracle.
Connect String	Specify the connect string used to access the ODI Repository schema. Use the format: *host:port:service_name*
ODI Repository Schema Username	Specify the schema name for the ODI Repository schema. The default name is <prefix>_BIA_ODIREPO. This is the repository you created when you ran the Business Analytics Applications Suite RCU.

Field	Description
ODI Repository Schema Password	Specify the password for the ODI Repository schema.

Click **Next**.

14. If you have selected any cloud extender sources SDS in step 7, then provide details in the applicable schema screen.
15. On the Configure Ports screen, specify these details:

Field	Description
Auto Port Configuration	Select this option if you want Oracle Business Analytics Applications Suite installer to configure the ports for you.
Specify Ports Using Configuration File	Select this option to use a configuration file to configure the ports. Optionally, click **Browse** to specify a configuration file location. Click **View/Edit File** to view or edit the file. A sample configuration file named staticport.ini is provided. The file is stored in the Disk1\stage\Response directory of the Business Analytics Applications Suite installer. You can edit this file to specify the configuration settings for your environment.

16. On the Summary screen, click **Save** to save the settings for this configuration in a response file (optional), and then click **Configure** to start the configuration process.
17. On the Configuration Progress screen, you can monitor the progress of the software configuration and respond to errors, if any occur.

    After the configuration concludes without any errors, click **Next**.

> **Note:**
>
> In case of errors, fix them and use the **Restart** button to progress with the configuration. Do not cancel the install after a failure as you will then need to remove the domain and BI instance to start again.

18. On the Complete screen, click **Save** to save the settings for this installation in a response file (optional), and then click **Finish** to exit the Oracle Business Intelligence Configuration Assistant.

How to Start the BI and ODI Managed Servers

Oracle BI Applications requires the BI and ODI Managed Servers (bi_server1 and odi_server1) to be started using Node Manager. This is required so that parameters, memory, and JVM arguments are appropriately set. If you do not start the BI and ODI Managed Servers, functionality loss and memory issues can occur in Configuration Manager, FSM, and ODI.

To ensure that the BI and ODI Managed Servers are started using Node Manager, start them using the WebLogic Administration Console user interface. Do not start the BI and ODI Managed Servers using the Managed Server start scripts.

Installing ODI Studio

You can design and manage the ODI Repository by using the ODI Studio desktop client. ODI Studio is typically installed on developer systems. The supported operating systems for ODI Studio are Windows 32-bit and 64-bit and Linux 32-bit.

1. Installing ODI Studio.
2. Configuring User Access for ODI Studio.

Installing ODI Studio

You install ODI Studio using the ODI installer.

Note these points:

- On the Select Installation Type screen, select **Developer Installation** as the installation type and both options under Developer Installation, that is, **ODI Studio (with local agent)** and **ODI SDK**.
- On the Repository Configuration screen, select the **Skip Repository Configuration** option.

To install ODI Studio, see Installation Overview for Oracle Data Integrator in *Installing and Configuring Oracle Data Integrator*.

Configuring User Access for ODI Studio

The ODI repository is configured for external authentication against the WebLogic Server embedded LDAP server. ODI Studio must be configured to use the appropriate security files for authentication. You must perform these steps on all installations of ODI Studio.

> **Note:**
>
> You must perform these steps even if ODI Studio has been installed on the machine where Oracle Home for BI resides.

To configure user access for ODI Studio:

1. Copy `cwallet.sso` and `jps-config-jse.xml` from:

   MW_HOME`/user_projects/domains/bifoundation_domain/odi-client-config/embedded`

   To:

   ODI_HOME`/oracledi/client/odi/bin`

2. Edit *ODI_HOME*`/oracledi/client/odi/bin/odi.conf` by updating the JPS configuration file name:

   ```
   AddVMOption -Doracle.security.jps.config=./jps-config-jse.xml
   ```

If you do not successfully complete these steps, you will receive the following error message: `ODI-10188: Error while login from OPSS<...>/jps-config.xml (No such file or directory)`.

3. Perform steps 1 and 2 on all instances of ODI Studio.

> **Note:**
>
> You must perform these steps even if ODI Studio has been installed on the system where Oracle Home for BI resides.

Regenerating the Security Files

If the Oracle BI Applications Administrator password or any ODI users' passwords were changed, administrators need to regenerate security files and redistribute the files to all instances of ODI Studio.

To regenerate security files:

1. Execute the `wlst.sh` script:

   ORACLE_HOME`/common/bin/wlst.sh` *MW_HOME*`/Oracle_BI1/bifoundation/install/createJPSArtifactsODI.py embedded --ADMIN_USER_NAME` *Administrator* `--DOMAIN_HOSTNAME` *Hostname* `--DOMAIN_PORT 7001 --DOMAIN_HOME_PATH` *MW_HOME*`/user_projects/domains/bifoundation_domain`
   Where ADMIN_USER_NAME is the WebLogic Server administrator user.

   The updated JPS configuration file and credential wallet are created at location:

   MW_HOME`/user_projects/domains/bifoundation_domain/odi-client-config/embedded`

2. Copy these updated files to *ODI_HOME*`/oracledi/client/odi/bin` on all ODI Studio instances.

3. Make sure that the `odi.conf` file is edited correctly, as described in step 2 in the previous procedure for configuring user access for ODI Studio.

   The `odi.conf file` is located in *ODI_HOME*`/oracledi/client/odi/bin`.

About Applying the ODI Studio Patch

The ODI Studio patch is available in `PATCH_ROOT_DIR/odi/generic`.

For an explanation of the PATCH_ROOT_DIR, see Applying Platform Patches.

System administrators must provide this patch to developers who have installed ODI Studio on their systems. Follow the instructions in the Patch Readme to apply the patch on ODI Studio.

> **Note:**
>
> If you installed ODI Studio on the BI Domain host machine, you don't have to apply the patch.

Copying Source Files

During installation of Oracle BI Applications, source files are installed in the BI_Oracle_Home/biapps/etl directory. These files are used during the ETL process and will be configured by functional developers. You must copy these files to a location that ODI Agent deployed in WebLogic Server can access but that is outside of the Oracle Home directory; otherwise, when the Oracle BI Applications environment is upgraded or patched, these files will be overwritten.

1. Navigate to the `BI_Oracle_Home/biapps/etl` directory.
2. Copy all files under the `BI_Oracle_Home/biapps/etl` directory into a location that ODI Agent deployed in WebLogic Server can access but is outside of the Oracle Home directory.

   Note these points:

   - Avoid copying the files to a location with a long directory path.
   - Do not put the files under the ODI Home directory.
   - Depending on your deployment, there may be files in the BI_Oracle_Home/biapps/etl directory that you will not use.

Configuring High Availability in Oracle Business Intelligence Applications

You can deploy a high-availability environment for the Weblogic components of BI Applications 11.1.1.10.2 including ODI. The deployment architecture is a two-node highly available configuration of the BI System with Oracle BI EE, BI Applications and the ODI components running on two Oracle WebLogic servers.

You are required to refer to the following documents while completing the various tasks:

- High Availability for Oracle Data Integrator and Configuring High Availability for Oracle Business Intelligence and EPM in *High Availability Guide* 11g Release 1 (11.1.1.9).
- My Oracle Support document (Doc ID 1275527.1) titled *Is the Oracle HTTP Server (OHS) Required For The OBIEE 11g High Available Solution?*.

The BI System is configured for high availability as described in Configuring High Availability for Oracle Business Intelligence and EPM in the *High Availability Guide*. You must modify some steps of this procedure for BI Applications deployment. Additional steps are required to configure the BI Applications components and ODI for high availability. Following are the steps to configure high availability for your BI Applications deployment. It is recommended that you first review the instructions below to understand the process and flow of steps before performing the procedures.

1. Complete the steps in Prerequisite Steps Before Setting Up a High Availability Configuration for Oracle BI Enterprise Edition and BI Publisher and Enabling VIP1 in APPHOST1 and VIP2 in APPHOST2 in *High Availability Guide*.
2. Install and set up BI Applications on a single machine (referred to as Machine 1 later in this section) as described in this guide.

The BI Applications Component Repository, the BI Applications ODI Repository and the Business Analytics Warehouse may be deployed into an Oracle Real Application Clusters (Oracle RAC) database using the BI Applications Repository Creation Utility (RCU).

After install and setup is completed, ensure that the BI Applications Configuration Manager, the Functional Setup Manager, ODI Console and the ODI Agent are up and running and are functional.

3. On a second machine (Machine 2), install BI EE, ODI and BI Applications as follows:
   a. Install Weblogic 10.3.6
   b. Install BI EE in Software-Only mode (do not install in Enterprise Install mode)
   c. Run the ODI Installer
   d. Run the BI Applications 11.1.1.10.2 Installer.
   e. Apply FMW patches.

      The directory paths you use for binary files and domains when installing on Machine 2 (or any additional nodes) must be identical to those on Machine 1 (first node).

> **Note:**
>
> Do not run `config.bat` or `config.sh` for BI as described in this guide. Instead run `config.bat` or `config.sh`. Do not run `configApps` to configure BI Applications or perform any other step for setting up BI Applications on this node.

4. Complete the steps in Oracle BI EE High Availability Configuration Steps (sections 14.1.13.5 through 14.1.13.11) in *High Availability Guide*.
5. Scale out the BI system on Machine 2. See Scaling Out the BI System on APPHOST2 in *High Availability Guide*.
6. Complete the steps in Oracle BI EE High Availability Configuration Steps (sections 14.1.13.13 through 14.1.13.19) in *High Availability Guide*.
7. Using the Weblogic Administration Console, on Machine 2 add another ODI server to the ODI cluster, for example, ‘odi_server2’. Associate this server to the ODI Cluster; example, ‘odi_cluster’.
8. Using the Weblogic Administration Console, restart both the ODI Managed Servers, example, odi_server1 and odi_server2.
9. Enable Oracle HTTP Server to route to bi_cluster and odi_cluster:
   a. For BI, see Configuring Oracle HTTP Server for the BI_SERVERn Managed Servers in *High Availability Guide*.
   b. For ODI, see Configuring Oracle HTTP Server in *High Availability Guide*.

      For example:
      # ODI Agent

```
<Location /oracledіagent>
 SetHandler weblogic-handler
  WebLogicCluster APPHOST1VHN1:15001, APPHOST2VHN1:15001
 WLProxySSL ON
```

```
  WLProxySSLPassThrough ON
 </Location>

<Location /odiconsole>
  SetHandler weblogic-handler
  WebLogicCluster APPHOST1VHN1:15001, APPHOST2VHN1:15001
  WLProxySSL ON
  WLProxySSLPassThrough ON
</Location>
```

> **Note:**
>
> Replace APPHOST1VHN1:15001 and APPHOST2VHN2:15001 with actual virtual host names and ports.

c. For BI Applications-specific applications: On WEBHOST1 and WEBHOST2, add the following lines to the ORACLE_BASE/product/fmw/Oracle_WT1/instances/web1/config/OHS/ohs1/mod_wl_ohs.conf file:

BIACM

```
<Location/biacm>
       SetHandler weblogic-handler
       WebLogicCluster APPHOST1VHN1:9704, APPHOST2VHN1:9704
       WLProxySSL ON
       WLProxySSLPassThrough ON
</Location>
```

FSMLITE

```
<Location/setup/faces>
       SetHandler weblogic-handler
       WebLogicCluster APPHOST1VHN1:9704, APPHOST2VHN1:9704
       WLProxySSL ON
       WLProxySSLPassThrough ON
</Location>
```

> **Note:**
>
> Replace APPHOST1VHN1:9704 and APPHOST2VHN2:9704 with actual virtual host names and ports)

10. On all nodes (Machine 1 and Machine 2), update the $DOMAIN_HOME/ config/fmwconfig/biinstances/coreapplication/BIAPPSConfig.properties file by editing the ODI_SERVER_PORT and ODI_SERVER_HOST parameters to point to the ODI Oracle HTTP Server (OHS) entry point. (This is the load balancer virtual server address and the load balancer virtual address listening port).
11. Restart the Oracle HTTP Server and the ODI Managed Servers (odi_server1 and odi_server2). Validate that you can access the URLs for the BI Applications Configuration Manager and ODI Console:
    - http://WEBHOST1:7777/biacm
    - http://WEBHOST2:7777/biacm
    - http://WEBHOST1:7777/odiconsole

- http://WEBHOST2:7777/odiconsole

Also validate that you can access these URLs using your load balancing router address:

- http://bi.mycompany.com:80/biacm
- http://bi.mycompany.com:80/odiconsole

12. Complete Oracle BI EE High Availability Configuration Steps (sections 14.1.13.21 and 14.1.13.22) in *High Availability Guide*.
13. In Copying Source Files, you copied the source files to a location outside of the Oracle Homes for BI and ODI. Copy these source files to a shared location which the ODI agents on Machine 1 and Machine 2 can access.
14. Update the location of source file for all the three physical schemas — BIAPPS_DW_FILE, DW_LOG_FILE, and DW_SHARED_FILE data server in the ODI Studio. Perform the below steps for all the three file data server types:
    a. Log into ODI Studio. Click **Topology Manager**, click **Technology**, and select **File**
    b. Expand the BIAPPS_DW_FILE/DW_LOG_FILE/DW_SHARED_FILE data server and double-click to open the physical schema.
    c. In the **Definition** pane, for the Directory (Schema) and Directory (Work Schema) properties, specify the shared location where you copied source files to in step 16 above.

       For example:`<Source File Home on Shared Location>/biapps/etl/data_files/src_files/BIA_11`.
15. Log into ODI Console. Click **Topology**, click **Agents**, click **Physical Agents**, and select **OracleDIAgent**. Update the ODI Agent Host Name and Port Number fields to point to the front end host and port.
16. Restart all BI and ODI Managed Servers.

BI Applications Configuration Manager, the Functional Setup Manager and the ODI Console and Agent are configured in Active:Active mode. Note that if an ODI Agent fails while in the middle of a session execution, that session will not be recovered on the same or second agent. To restart a load plan, see Restarting Load Plans in *Oracle Business Intelligence Applications ETL Guide*.

Next Steps After Installation — System Setup

The next steps in the installation and setup process are to perform the system setup tasks and configure BI Applications–ODI Authentication to external (OID).

See Performing Post-Installation System Setup Tasks . These tasks are required to complete integration of the Oracle BI Applications components and to ready the system for functional configurations and data loads.

Steps to Configure BI Applications–ODI Authentication to External (OID)

Oracle Business Intelligence uses the Oracle WebLogic Server LDAP directory for authentication by default. The Oracle BI Applications installation on the BI EE platform requires the use of the embedded Weblogic LDAP. Once Oracle BI Applications has been installed and set up, you can configure it to use an external LDAP for authentication.

Prerequisite: Oracle BI Applications 11.1.1.9.1+ has been installed into the BI Domain where the default Weblogic embedded LDAP is used for authentication.

> **Note:**
>
> The Oracle BI Applications installation will fail if an external LDAP system is being used. If you have configured the BI system for use with an external LDAP (for example, Oracle Internet Directory), then you must re-configure to use the default Weblogic embedded LDAP before you perform the Oracle BI Applications installation.

To configure the BI system including Oracle BI Applications to use an external authenticator:

1. Configure the Business Intelligence system to use an external LDAP for authentication.

   See Using Alternative Authentication Providers in *Security Guide for Oracle Business Intelligence Enterprise Edition* 11g Release 1 (11.1.1).

2. Create the Oracle BI Applications Administrator and BIAppsSystemUser users in the external LDAP system.

   In the external LDAP, create the Oracle BI Applications Administrator user. This user will be granted the Oracle BI Applications Administrator Duty and will be added to the ODI Repository with Supervisor privileges during script execution in step 4 below. This user will have full access to Configuration Manager and to ODI Console and the ODI Repository. In the external LDAP, create a user with name “BIAppsSystemUser”(this is case sensitive) and make sure uid attribute in OID is updated with the same name. This user credentials will be used by the ODI Java EE Agent deployed in Weblogic to connect to the ODI Repository. This user will also be created in the ODI repository with SUPERVISOR privileges during script execution in step 4 below.

3. Update the `oracle.biapps.system` credential map to include the `BIAppsSystemUser` user.

   Run `wlst.sh` from `MW_HOME/oracle_common/common/bin` folder:

   ```
   connect('<ADMIN_USER_NAME>', '<ADMIN_PASSWORD>', 't3://<host>:<port>')
   updateCred(map='oracle.biapps.system', key='system.user',
   user='BIAppsSystemUser', password='<Password_forBIAppsSystemUser>',
   desc="Credential")
   ```

   where: `<Password_forBIAppsSystemUser>` is the password entered for the `BIAppsSystemUser` in step 2 above

4. Run `switch_odiToExternalAuth.py` script.

   This script associates the Oracle BI Applications Administrator Duty to the Oracle BI Applications Administrator user and adds the Oracle BI Applications Administrator and BIAppsSystemUser users to the ODI repository with Supervisor privileges. The ODI will be configured to use the external LDAP for authentication.

   Run the following command from `MW_HOME/oracle_common/common/bin` folder:

   ```
   ./wlst.sh <ORACLE_HOME>/bifoundation/install/switch_odiToExternalAuth.py --
   ADMIN_USER_NAME <ADMIN_USER> --DOMAIN_HOSTNAME <DOMAIN_HOST> -- DOMAIN_PORT
   ```

```
<DOMAIN_PORT> --DOMAIN_HOME_PATH <FULL_DOMAIN_PATH> -- ODI_HOME_PATH
<FULL_ODI_HOME_PATH> --ODI_DB_CONN_STRING jdbc:oracle:thin:@<ODI_DB_CONN_STRING>
--ODI_DB_SCHEMA_USER <ODI_SCHEMA_USER> --ODI_CONSOLE_USER_NAME
<ODI_CONSOLE_USER> -- OID_USER <OID_USER> --LDAP_URL <LDAP_URL> --
USERBASE_PREFIX <USERBASE_PREFIX_IN_OID> --GROUPBASE_PREFIX
<GROUPBASE_PREFIX_IN_OID>
```

Where the `ODI_CONSOLE_USER` is the Oracle BI Applications Administrator user.

Restart the ODI Managed Server using Weblogic Administration Console.

5. Configure ODI Studio Security files.

   The ODI Repository is configured for external authentication against your external LDAP server. ODI Studio must be configured to use the appropriate security files for authentication. The security files have to be regenerated for login to ODI Studio to be successful.

   a. Run the following command from `BI_ORACLE_HOME/common/bin` folder in order to generate the ODI client security artifacts.

      > **Note:**
      >
      > Do not run `wlst` from any other location.

      ```
      ./wlst.sh <MW_HOME>/Oracle_BI1/bifoundation/install/createJPSArtifactsODI.py
      external -- ADMIN_USER_NAME <Administrator> --DOMAIN_HOSTNAME <Hostname> --
      DOMAIN_PORT <Domain Port, e.g. 7001> --DOMAIN_HOME_PATH <Domain Home Path,
      e.g. MW Home>/user_projects/domains/bifoundation_domain> --OID_USER
      cn=orcladmin --LDAP_URL <ldap://host:port> --USERBASE_PREFIX <User base
      where users will be searched, e.g., cn=users,dc=us,dc=oracle,dc=com> --
      GROUPBASE_PREFIX <user group, e.g., cn=groups,dc=us,dc=oracle,dc=com>
      Where:
      the 'external' parameter is used to configure to the external LDAP system.
      --ADMIN_USER_NAME : Weblogic Administrator user Name
      --DOMAIN_HOSTNAME : BI Domain host name
      --DOMAIN_PORT: BI Domain port
      --DOMAIN_HOME_PATH : BI Domain home path
      --OID_USER: OID user, e.g. cn=orcladmin
      --LDAP_URL: external ldap url; format: ldap://host:port
      --USERBASE_PREFIX : user base prefix; where users will be searched; e.g.
      cn=users,dc=us,dc=oracle,dc=com
      --GROUPBASE_PREFIX : user group prefix; e.g. cn=groups,dc=us,dc=oracle,dc=com

      Example: ./wlst.sh /scratch/mw6826/Oracle_BI1/bifoundation/install/
      createJPSArtifactsODI.py external --ADMIN_USER_NAME Administrator --
      DOMAIN_HOSTNAME slc01apw.us.oracle.com --DOMAIN_PORT 7001 --
      DOMAIN_HOME_PATH /scratch/mw6826/user_projects/domains/bifoundation_domain --
      OID_USER cn=orcladmin -- LDAP_URL ldap://scl14405.us.oracle.com:3060 --
      USERBASE_PREFIX cn=users,dc=us,dc=oracle,dc=com --GROUPBASE_PREFIX
      cn=groups,dc=us,dc=oracle,dc=com
      ```

   b. Copy the `jps-config-jse.xml`file and `cwallet.sso` files from `DOMAIN_HOME_PATH/odi-client-config/external` to `ODI_Home/oracledi/client/odi/bin` on all machines where ODI Studio clients have been installed.

   c. Open the `ODI_Home/oracledi/client/odi/bin/odi.conf` file for editing.

Edit the line starting with `AddVMOption -Doracle.security.jps.config` to point to the `jps- config-jse.xml` file and location as follows:

```
AddVMOption -Doracle.security.jps.config=./jps-config-jse.xml
```

(where `jps-config-jse.xml` and `cwallet.sso` have been copied to the `ODI_Home/oracledi/client/odi/bin` directory).

4

Performing Post-Installation System Setup Tasks

Perform these post-installation system setup tasks for Oracle Business Intelligence Applications (Oracle BI Applications).

Topics:

Setting the Business Analytics Warehouse Connection in Oracle Data Integrator

Use Oracle Data Integrator (ODI) Studio to set the connection properties in the ODI Repository of the physical schema associated with the BIAPPS_DW_FILE physical server.

To set the Oracle Business Analytics Warehouse physical schema connection in ODI:

1. Log in to ODI Studio using the Oracle BI Applications Administrator credentials.
2. In the navigation pane, go to **Topology**, and expand **Technologies**, and then expand **File**.

3. Double-click **BIAPPS_DW_FILE**.
4. In the Definition pane, for the Directory (Schema) and Directory (Work Schema) properties, specify the directory where you copied source files to in Copying Source Files, and include the sub-folders `data_files/src_files/BIA_11`.

   For example:

   SOURCE_FILE_HOME`/biapps/etl/data_files/src_files/BIA_11`

Creating SDS Schema Post Installation

Provision new SDS PLV types in ODI using the script provided in this topic. The script exists in the oracle home and can be used immediately.

This script creates the WLS datasource for the SDS type and provisions the SDS Data server in ODI.

```
You need to create the SDS DB schema through the RCU before running this script as
the script requires some schema details as input parameter.
```

Run the RCU and when prompted on screen, select one or more SDS types for which you want to configure. No other component type should be selected apart from the SDS types in the Cloud Replicator node.

Command

Script location is `<ORACLE_HOME>/dwtools/scripts/install_cloud_replicator_component_SDS.py`

Parameters

```
--DOMAIN_HOME_PATH - BI Domain Home path. eg; /scratch/aime1/work/mw1234/
user_projects/domains/bifoundation_domain
--BI_CLUSTER_NAME - BI Cluster name. Please use the value as is without quotes -
"bi_cluster"
--SDS_PROVISION_TYPE - The SDS PLV code. Please see the table below to use the PLV
code to provision a specific SDS type. eg; TALEO_14_B
--SDS_JDBC_URL - SDS PLV JDBC url string format: jdbc:oracle:thin:@<db_host>:<port>/
<ServiceName> eg; jdbc:oracle:thin:@adc00zqz.us.oracle.com:11313/db7043.us.oracle.com
--SDS_DB_SCHEMA - SDS PLV db schema user name eg; FA_SDS_TALEO_14B
--ODI_JDBC_URL - ODI REPO JDBC url string format: jdbc:oracle:thin:@<db_host>:<port>/
<ServiceName> eg; jdbc:oracle:thin:@adc00zqz.us.oracle.com:11313/db7043.us.oracle.com
--ODI_DB_SCHEMA - ODI REPO schema user name. eg; FA_BIA_ODIREPO,
--ODI_USER_NAME - ODI user name. eg; Administrator1,
--ODI_HOME_PATH - ODI home path. eg; /scratch/aime1/work/mw1234/odi3898
```

SDS PLV Code to use in the command

- EBS_11_5_10
- EBS_12_1_1
- EBS_12_1_2
- EBS_12_1_3
- EBS_12_0
- EBS_12_2
- ELQ_10

- FUSION_9_0
- FUSION_10_0
- FUSION_11_0
- JDE_9_0
- JDE_9_1
- PSFT_9_0_CS
- PSFT_9_0_EP
- PSFT_9_0_HR
- PSFT_9_1_CS
- PSFT_9_1_EP
- PSFT_9_1_HR
- PSFT_9_2_CS
- PSFT_9_2_EP
- PSFT_9_2_HR
- RNCX_12_14_8
- SEBL_8_1_1
- SEBL_8_2_2
- TALEO_13_B
- TALEO_13_C
- TALEO_14_A
- TALEO_14_B
- TALEO_15_A

Below example shows the SDS provisioning of Taleo 14 B. See the input param `--SDS_PROVISION_TYPE` **`TALEO_14_B`**

Run the following command:

```
Eg Usage Command:  <ORACLE_HOME>/oracle_common/common/bin/wlst.sh   /scratch/aime1/
work/mw1234/Oracle_BI1/dwtools/scripts/install_cloud_replicator_component_SDS.py --
DOMAIN_HOME_PATH /scratch/aime1/work/mw1234/user_projects/domains/
bifoundation_domain --BI_CLUSTER_NAME bi_cluster --SDS_PROVISION_TYPE TALEO_14_B --
SDS_JDBC_URL jdbc:oracle:thin:@adc00zqz.us.oracle.com:11313/db7043.us.oracle.com --
SDS_DB_SCHEMA FA_SDS_TALEO_14B --ODI_JDBC_URL
jdbc:oracle:thin:@adc00zqz.us.oracle.com:11313/db7043.us.oracle.com --ODI_DB_SCHEMA
FA_BIA_ODIREPO --ODI_USER_NAME Administrator1 --ODI_HOME_PATH /scratch/aime1/work/
mw1234/odi3898
```

Performing Setup Steps for On-Premises Oracle Fusion Applications Sources

These procedures apply to on-premises Oracle Fusion Applications sources.

- Creating a User for ETL
- Configuring the Oracle BI Repository for ETL

Creating a User for ETL

The ETL process must be run by a user with appropriate data security privileges granted on the Oracle Fusion Applications tables from which data is extracted into Oracle Business Analytics Warehouse. For this purpose, the enterprise role named FUSION_APPS_OBIA_BIEE_APPID is provisioned during the installation of Oracle Fusion Applications with the appropriate ETL security privileges.

This procedure applies only to on-premises Oracle Fusion Applications sources. Work with your security administrator for Oracle Fusion Applications to complete these steps.

1. In the Oracle Fusion Applications LDAP system, create a new user.

   For example, you might create a new user named OBIA_ETL_USER.

2. Make the user a member of the Enterprise Role FUSION_APPS_OBIA_BIEE_APPID.

3. Make a note of the user credentials.

4. When using the embedded LDAP for Oracle BI Applications, create a user with exactly the same credentials as the ETL user created in Oracle Fusion Applications LDAP.

   Grant this OBIA_ETL_USER the BIAdministrator Duty Role.

Configuring the Oracle BI Repository for ETL

This procedure applies only to on-premises Oracle Fusion Applications sources.

To configure the repository for ETL against on-premises Oracle Fusion Applications sources:

1. Log into Oracle BI Administration Tool.

2. Open the Oracle BI Repository for Oracle BI Applications in offline mode.

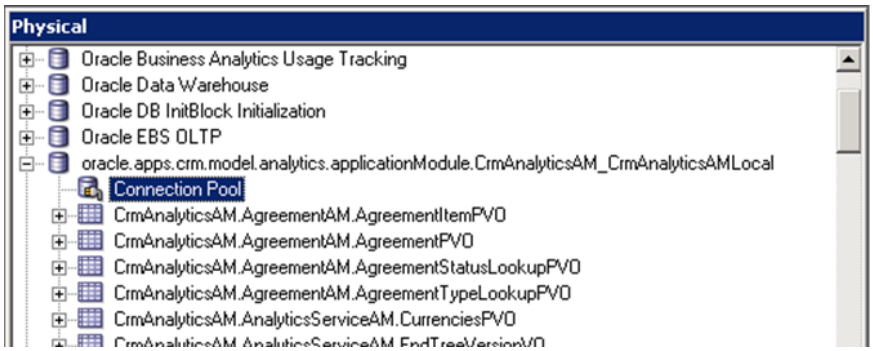
3. In the Physical layer, configure a connection to the BIEE broker for each of the Oracle Fusion Applications pillar domains. Set the connection for each of these Physical layer objects:

Pillar	Physical Layer Object
CRM	oracle.apps.crm.model.analytics.applicationModule.CrmAnalyticsAM_CrmAnalyticsAMLocal
FSCM	oracle.apps.fscm.model.analytics.applicationModule.FscmTopModelAM_FscmTopModelAMLocal
HCM	oracle.apps.hcm.model.analytics.applicationModule.HcmTopModelAnalyticsGlobalAM_HcmTopModelGlobalAMLocal

   a. Right-click one of the pillar objects, and select **Properties**.

   b. In the General tab of the Database dialog, select **Allow direct database requests by default**.

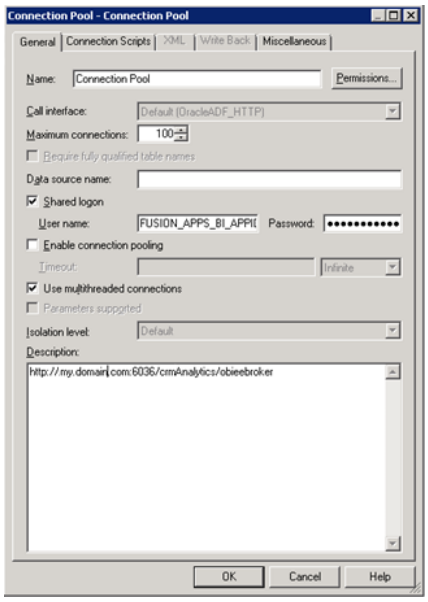
   c. Expand the pillar object, and double-click **Connection Pool**.



The Connection Pool dialog opens.

d. In the General tab, enter `FUSION_APPS_BI_APPID` as the data source user name, and enter the password for this user.

You can obtain the password for the FUSION_APPS_BI_APPID user from your Oracle Fusion Applications administrator.



e. In the Miscellaneous tab, in the Application Server URL field, enter the URL for the BIEE broker for the appropriate pillar, in the format:

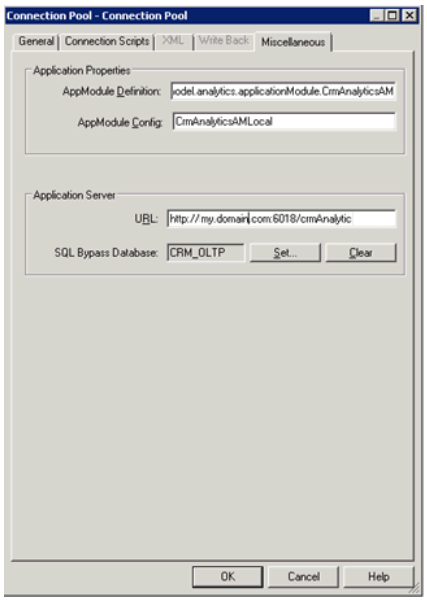
```
Http://<host>.<domain>:<port>/<pillar>Analytics/obieebroker
```

For example:

```
Http://hostName.myDomain.com:30615/crmAnalytics/obieebroker
```

f. In the SQL Bypass Database field, enter <PILLAR>_OLTP.

For example: CRM_OLTP.



g. Repeat steps 3a through 3e for each of the three pillars.

4. Set the value for these DSN variables.

   These variables specify the connection to the Fusion Applications transactional database.

   - CRM_OLTP_DSN
   - FSCM_OLTP_DSN
   - FBI_OLTP_DSN
   - HCM_OLTP_DSN
   - OLTP_DSN (used by the Marketing OLTP data source)

   a. In the menu bar, select **Manage**, then **Variables**.

   b. In the Variable Manager dialog, scroll down to locate the <PILLAR>_OLTP_DSN variable.

   c. Double-click the **<PILLAR>_OLTP_DSN** variable.

      The Static Repository Variable dialog opens.

   d. In the **Default Initializer** text box, enter the connection information to the Fusion Applications transactional database in the tnsnames.ora format.

      For example:

      ```
      '(DESCRIPTION=(ADDRESS=(PROTOCOL=TCP)
       (HOST=db_host_name.domain.com)
       (PORT=<port>))(CONNECT_DATA =
       (SERVICE_NAME=<service_name>)))'
      ```

   e. Repeat steps 4a through 4e for each DSN.

5. Set the value for these user variables.

   These variables specify the Oracle Fusion Applications transactional database user.

   - CRM_OLTP_USER

- FSCM_OLTP_USER
- FBI_OLTP_USER
- HCM_OLTP_USER
- OLTP_USER (used by the Marketing OLTP data source)

a. Obtain the user name for the users listed above from the repository for Oracle Transactional Business Intelligence.

b. Obtain the password for the users from the Oracle Fusion Applications administrator.

   You will need this password in a later step.

c. In the menu bar, select **Manage**, **Variables**.

d. In the menu bar of the Variable Manager dialog, select **Action**, **New**, **Repository**, then **Variable**.

e. In the Variable Manager dialog, scroll down to locate the <PILLAR>_OLTP_USER and OLTP_USER variables.

f. Double-click the variable.

   The Static Repository Variable dialog opens.

g. In the Default Initializer text box, enter the user name.

h. Repeat steps 4a through 4e for each user.

6. Configure the connection pool for each of the OLTP objects listed in the Physical layer:

   - CRM_OLTP
   - FSCM_OLTP
   - FBI_OLTP
   - HCM_OLTP
   - Marketing OLTP

   a. Expand the object.

   b. Double-click **Connection Pool**.

      For Marketing OLTP, double-click **Fusion OLTP Connection Pool**.

      The Connection Pool dialog opens.

   c. In the Data source name field, enter VALUEOF(<PILLAR>_OLTP_DSN).

      For example: `VALUEOF(CRM_OLTP_DSN)`.

      For Marketing OLTP, enter `VALUEOF(OLTP_DSN)`

   d. In the User name field, enter VALUEOF(<PILLAR>_OLTP_USER).

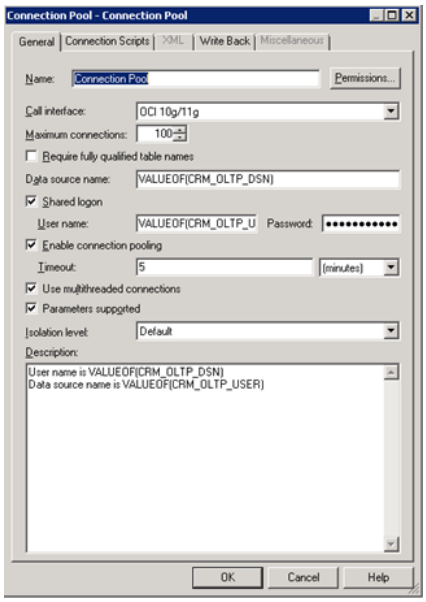
      For example: `VALUEOF(CRM_OLTP_USER)`.

      For Marketing OLTP enter `VALUEOF(OLTP_USER)`.

      The user for CRM_OLTP, FSCM_OLTP, FBI_OLTP, and HCM_OLTP is the same. The user for Marketing OLTP is the value of OLTP_USER, which is different from the user for the other pillars.

   e. In the **Password** field, enter the password for the user.

Obtain this password from the Oracle Fusion Applications administrator.



f. Repeat steps 6a through 6e for each of the OLTP objects.

Registering Source Systems and Propagating Connection Details to Oracle Data Integrator

Use this procedure to register a source system and propagate the connection details to ODI.

To register a source system:

> **Note:**
>
> If you want to register the Oracle Fusion Applications source, then follow the steps in Register the Fusion Applications Source.

1. Launch Oracle BI Applications Configuration Manager using the URL http://<host>:<port>/biacm, and log in as the Oracle BI Applications Administrator user.

   This user was created in the procedure Configuring Oracle BI Applications.

2. In the navigation pane, select the **Define Business Intelligence Applications Instance** link, which appears under System Setups.

   The Source Systems tab is displayed.

3. Click the **Add** icon.

   The Register Source dialog displays.

4. Register the source in Configuration Manager, specify these properties.

Property	Description
Product Line	Select the source instance product line. For Oracle Fusion sources, select Oracle Fusion.
Product Line Version	Select the version number of the source instance product line.
Source Instance Name	Specify a name for the source instance. This is the name given by the Oracle BI Applications System Administrator to a transactional system that serves as a source of data for Oracle BI Applications data load. The source instance is important because functional setup tasks, and the setting of values for objects such as parameters and domain maps are performed in relation to a source instance.
Description	(Optional) Enter additional information about the source instance.
Data Source Number	Enter a unique number to identify the source instance. The Data Source Number value specifies a data source so that the data can be identified in the Oracle Business Analytics Warehouse. Each source instance must have a unique Data Source Number.*
Data Server	For all sources except PeopleSoft sources, a read-only list of data servers is displayed. For PeopleSoft Enterprise sources, in the Data Server Details window, select the appropriate data server for the source instance.

> **Note:**
>
> *However, ensure that this value is same in all (dev/testing/production) environments, else import/export of data fails with errors.

Click **Next**. The Register Source in ODI Topology page is active.

5. Register the source in ODI:
   a. Select **Global** from the Context drop-down list.

      The Global value is required because the Oracle BI Applications interfaces are designed to use this value.

   b. In the Technology: Oracle tab, specify these properties:

Property	Description
ODI Data Server Name	Specify a name for the ODI Data Server that indicates the transactional OLTP database (source database). This ODI Data Server Name must be unique across all ODI data servers in the ODI Repository.
JDBC Driver	The name of the JDBC driver for the transactional OLTP database (source database) connection. For Oracle Fusion sources, this property indicates the name of the JDBC driver for the Oracle BI Server. For example: `oracle.bi.jdbc.AnaJdbcDriver`. Data from the Fusion Applications transactional system is retrieved from the Oracle BI Server. Oracle recommends that you use the default value.

Property	Description

JDBC URL	Specify the JDBC URL for the transactional OLTP database (source database) connection. The format for the URL is:
	`jdbc:oracle:thin:@<host>:<port>:<sid>`
	If your source is Oracle Fusion Applications on-premises, specify the JDBC URL for the Oracle BI Server. The format is
	`jdbc:oraclebi://<BI Server host>:<BI Server port>/ PrimaryCcs=<Cluster Controller Host>;PrimaryCcsPort=<Cluster Controller Port>`
	For example:
	`jdbc:oraclebi://biserverHost:9703/ PrimaryCcs=CCSHost;PrimaryCcsPort=9706`

Database Username	Specify the database user name for the transactional OLTP database (source database). For Oracle Fusion sources, specify the user name of the ETL user. This is the user created in Creating a User for ETL.
Database Password	Specify the password for the transactional OLTP database (source database). For Oracle Fusion sources, specify the password for the ETL user.
Test	Use this button to test the connection to the transactional OLTP database (source database).

c. In the Technology: File System tab, specify these properties:

Property	Description
ODI Data Server Name	Specify a name for the file system data server. This ODI Data Server Name must be unique across all ODI data servers in the ODI Repository.
Host Name	Specify the name of the host system where the file system (source files used for ETL) resides. This is the system to which you copied the source files in the procedure Copying Source Files.
Path To File	Specify the directory where you copied the source files in Copying Source Files. The directory path must include the appropriate source-specific folder for your environment. The source-specific folders are located in `/biapps/etl/data_files/src_files`. For example, if your source system is Oracle EBS 12.1.1, the directory path would be: *`SOURCE_FILE_HOM`*`E/biapps/etl/data_ files/ src_files/EBS_12_1_1`
Array Fetch Size	The number of rows requested by ODI on each communication with the data server. This column may be hidden. To view this column, click **View**, **Columns**, **Show All**.
Batch Update Size	The number of rows in a single INSERT command. This column may be hidden. To view this column, click **View**, **Columns**, **Show All**.

Property	Description
JDBC Driver	Oracle recommends that you use the default value. This column may be hidden. To view this column, click **View**, **Columns**, **Show All**.
JDBC URL	Oracle recommends that you use the default value. This column may be hidden. To view this column, click **View**, **Columns**, **Show All**.

d. Click **Save and Close**.

This information is passed to ODI where the connections are created.

> **Note:**
>
> The connection details are not propagated to the ODI Repository until you have entered and saved the information on both the Register Source in Configuration Manager page and the Register Source in ODI Topology page.

Enabling Offerings for Deployment

Use Configuration Manager to enable the Oracle BI Applications offerings that you have purchased and are deploying. The setup data relating to offerings is made visible in Configuration Manager when you enable the offering.

By default, if you have multiple source instances and you enable an offering, the offering is enabled for all source instances. If an offering won't source from all source instances, then you can disable the source instances from which the offering won't source. For example, suppose you have two source instances, Oracle EBS and PeopleSoft, and you are deploying Financial Analytics. If Financial Analytics will only source from PeopleSoft, then you would disable the Oracle EBS source instance for the Financial Analytics offering.
To enable Oracle BI Applications offerings for deployment:

1. Log in to Configuration Manager as the Oracle BI Applications Administrator user.
2. Select the **Manage Business Intelligence Applications** link to display the Manage Business Intelligence Applications dialog.
3. Select the **Business Intelligence Application Offerings** tab.
4. Select **Enabled** next to each offering you want to deploy.

   Enabling an offering makes the setup data associated with that offering available in Configuration Manager.
5. Click **Save** to save your changes.
6. To exit this dialog, click **Done**.

Disabling a Source Instance

You can disable a source instance from which an offering will not source.

1. Go to the **Business Intelligence Application Offerings and Associated Sources** tab.

2. Expand the appropriate offering.
3. Deselect **Enabled** for the source you want to disable.
4. Click **Save**.

Setting Languages for Data Load into the Business Analytics Warehouse

Oracle BI Applications supports data loads in multiple languages. You specify the languages for data loads in Configuration Manager.

> **Note:**
>
> PSFT and JDE customers must also configure the `LANGUAGE_BASE_OLTP` variable before executing the Domain-Only load plan. This is the base language of the PeopleSoft or JD Edwards OLTP and not necessarily the BI Apps base language. The `LANGUAGE_BASE_OLTP` variable does not apply to any other source system.

1. Log in to Configuration Manager as a user with the Oracle BI Applications Administrator duty role.
2. Select the **Manage Warehouse Languages** link to display the Manage Warehouse Languages page.
3. In the Manage Business Analytics Warehouse Languages tab, specify the languages from which data is to be extracted from the list of languages displayed in the table by selecting **Yes** from the Installed menu.

   Note that American English is the default installed language. All other languages are disabled.

   > **Note:**
   >
   > When you specify a language as being Installed, the Data Load Parameter LANGUAGE_LIST is populated internally with the list of selected languages. This parameter list is used during data extraction to extract data in the selected languages.

4. Click **Save** to save your changes.

Running the Domains Load Plan

You must define, generate, and run a domains load plan to load source-specific data into Configuration Manager tables. This enables Configuration Manager to display the appropriate source-specific values as choices in drop-down lists for setup objects.

Before you perform this step you must have completed the procedure Registering Source Systems and Propagating Connection Details to Oracle Data Integrator, including registering the source in the Register Source in ODI Topology page.

Additionally, if you have Fusion Cloud as a source in a load plan, then do not run such plans until you have set up the Oracle Fusion Applications cloud data source. See Setting up Fusion Applications Cloud Data Sources.

To define, generate, and run the domains load plan:

1. Define the domains load plan:
   a. In the Tasks pane of Configuration Manager, select **Manage Load Plans**, which appears under the Load Plans Administration heading.

      The Manage Load Plans page is displayed.

   b. In the Load Plans toolbar, click the **Add** icon.

      The Create Load Plan page is displayed.

   c. On the first page of the Create Load Plan series, specify this information:

Field	Description
Name	Enter a unique name for the load plan.
Description	(Optional) Enter additional information about the load plan.
Load Plan Type	Select **Domain-only Extract and Load (SDE and SIL).**
Source Instances	Select a source instance. If you do not select an instance, then all instances are selected by default.

   d. Click **Next.**

      The second page of the Create Load Plan series displays.

   e. In the Available Fact Groups tab, select the fact groups you want to include in the domains load plan definition.

      The fact groups may belong to a hierarchy of fact groups. You can select only the top level parent fact group and not a child fact group.

      A load plan must contain at least one fact group. Multiple fact groups may be selected from one or more data sources.

   f. Click **Save**.

      A submenu is displayed with these options:

      - Click **Save** to save the load plan. After a load plan is saved, it is displayed in the Load Plans master list.
      - Click **Save and Generate Load Plan** to save the load plan and immediately generate it.

      The generation process in Configuration Manager propagates the load plan properties to the ODI Repository, where the load plan is built.

2. If you did not generate the load plan upon saving in the previous step, then generate it:
   a. In the Load Plans master list, select the domains load plan you defined in step 1.

   b. In the Load Plans toolbar, click the **Generate** icon.

   The Generation Status column indicates the progress of the generation process. The process must complete successfully before you can move on to the next step. Click the **Refresh** icon to refresh the display.

3. Run the domains load plan by selecting it in the master list, and clicking the **Execute** icon on the toolbar.

Mapping Externally Conformed Domains

After you run the domains load plan, you must complete the mapping of externally conformed domains to point to a particular source (even if you have only one source) in Configuration Manager.

You must perform the mapping configuration for each domain listed in the Manage Externally Conformed Domains dialog.

User Access to Configuration Manager, FSM, and Oracle Data Integrator

On installation the Oracle BI Applications system is configured to use WebLogic Server embedded LDAP for authentication. Work with your security administrator to grant users access to Configuration Manager, Functional Setup Manager (FSM), and ODI.

Access to Configuration Manager and FSM is controlled through these duty roles:

- BI Applications Administrator Duty
- BI Applications Functional Developer Duty
- BI Applications Implementation Manager Duty
- Load Plan Operator Duty
- Load Plan Administrator Duty

The security administrator must grant the appropriate duty roles to a user based on the user's job responsibilities. See Duty Roles for Access to Functional Setup Manager or Configuration Manager in *Oracle Business Intelligence Applications Security Guide*.

The Oracle BI Applications administrator, load plan operator, and load plan administrator users require appropriate access to ODI. In addition to these users being created in the LDAP system, you must create these users in the ODI Repository and grant them the Supervisor profile or an appropriate ODI profile. The Oracle BI Applications administrator must be granted the Supervisor role in ODI. Work with your security administrator to grant the duty roles.

To manage security in ODI, see Managing the Security in Oracle Data Integrator in *Developing Integration Projects with Oracle Data Integrator*.

Additionally, you must complete the following steps to configure the **Signout** link to work for Configuration Manager on an Oracle Access Manager (OAM) enabled environment:

1. Execute the commands through WLST as the following:

```
addOAMSSOProvider(loginuri="/${app.context}/adfAuthentication",
logouturi="/oamsso/logout.html", autologinuri="/obrar.cgi")
Example:
cd <MW_HOME>/oracle_common/common/bin
./wlst.sh
connect ('biadmin,'welcome1','t3://<WLS_HOST>:<WLS_PORT');
```

```
wls:/>addOAMSSOProvider(loginuri="/${app.context}/adfAuthentication",
logouturi="/oamsso/logout.html", autologinuri="/obrar.cgi")
```

2. Bounce bi_server1.

Editing Preferred Currency Display Names and Enabling Document Currency

Oracle Business Intelligence is installed with a set of preferred currencies with pre-configured preferred currency names and preferred currency codes. Preferred currency names are used on Oracle Business Intelligence dashboards in the Currency drop-down on the My Account dialog\Preferences tab for a user logged into Oracle Business Intelligence.

You can use the Manage Preferred Currencies dialog to edit the default currency display names. You edit preferred currency name values to change the currency labels that are displayed in all modules associated with BI dashboards. For example, you might want to change the 'Local Currency' label from 'Ledger Currency' to 'Local Currency'.
To edit currency display names:

1. Login to Configuration Manager as the Oracle BI Applications Administrator user.
2. Under System Setups, select **Manage Preferred Currencies** to display the Manage Preferred Currencies dialog.
3. Select a currency in the Preferred Currencies list.

   Selecting the currency displays the associated modules in the bottom table.
4. Click the value in the Preferred Currency Name column (or click the Edit icon) to display the Preferred Currency Name dialog.
5. In the Preferred Currency Name field, specify a currency name.

   This is the name that will appear for end users in the Currency drop-down list, located in Preferences tab of the My Accounts dialog of Oracle Business Intelligence.
6. Click **Save and Close**.

Enabling Document Currency

By default, document currency is excluded from the Currency drop-down list (located in the Preferences tab of the My Accounts dialog in Oracle Business Intelligence).

To include Document currency in the Currency drop-down list, you must remove a specific filter from all of these security groups in the repository:

- OBIA_PROJECT_CURRENCY_PREFERENCES
- OBIA_HCM_CURRENCY_PREFERENCES
- OBIA_SCM_CURRENCY_PREFERENCES
- OBIA_FINANCIAL_CURRENCY_PREFERENCES
- OBIA_MFG_CURRENCY_PRFERENCES
- OBIA_PROCUREMENT_CURRENCY_PREFERENCES

- OBIA_MARKETING_CURRENCY_PREFERENCES
- OBIA_PARTNER_CURRENCY_PREFERENCES
- OBIA_CRM_CURRENCY_PREFERENCES
- OBIA_SALES_CURRENCY_PREFERENCES

> **Note:**
>
> The security groups listed above are displayed in Oracle BI Administration Tool on the Application Roles tab on the Identity Manager dialog.

1. In Oracle BI Administration Tool, click **Manage**, then **Identity,** to display the Identity Manager dialog.
2. In the Identity Manager dialog, click **BI Repository**.
3. Display the Application Roles tab.
4. For each of the security groups in the repository list:
   a. Double-click the security group to display the Application Role - <Name> dialog.
   b. Click **Permissions**, and then display the Data Filters tab.
   c. In the Data Filter column, remove the filter:

      ```
      AND "Core"."Fact - Preference List"."Currency Preference Code" <> 'Document
      Currency'
      ```

      For example, the filter before editing:

      ```
      "Core"."Fact - Preference List"."Module Code" = 'PROJECT_AN' AND
      "Core"."Fact - Preference List"."Currency Preference Flag" in ('W', 'B')
      AND   "Core"."Fact - Preference List"."Currency Preference Code" <>
      'Document Currency'
      ```

      For example, the filter after editing:

      ```
      "Core"."Fact - Preference List"."Module Code" = 'PROJECT_AN' AND
      "Core"."Fact - Preference List"."Currency Preference Flag" in ('W', 'B')
      ```
5. Save the changes.

   If you edited the metadata repository in Offline mode, then you must use Oracle Enterprise Manager Fusion Middleware Control to upload the repository.

> **Tip:**
>
> In Oracle Enterprise Manager Fusion Middleware Control, use the Upload BI Server Repository area on the Business Intelligence \coreapplication\Deployment\Repository tab. To upload the repository, see Using Fusion Middleware Control to Upload a Repository and Set the Oracle BI Presentation Catalog Location in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Enabling Initialization Blocks

For all source systems other than Oracle Fusion Applications, you must enable initialization blocks. Initialization blocks are enabled for Oracle Fusion Applications by default.

This procedure uses forward slashes to separate directories, indicating the UNIX/Linux directory structure. For Windows, substitute a backslash; the directory structure is the same as that for UNIX/Linux.

1. Copy the sample config.txt file from *ORACLE_HOME*/biapps/biarpdutil/bin to *ORACLE_HOME*/biapps/biarpdutil/lib.
2. Copy the Oracle BI Repository file for Oracle BI Applications from *ORACLE_HOME*/biapps/admin\provisioning/OracleBIServerComponent to *ORACLE_HOME*/biapps/biarpdutil/lib.
3. Add *ORACLE_HOME*/bifoundation/server/bin to the PATH system variable.
4. Execute the bi-init command to display a command prompt that is initialized to your Oracle instance. The bi-init file is located in ORACLE_INSTANCE/bifoundation/OracleBIApplication/coreapplication/setup.
   - For Windows, execute bi-init.cmd.
   - For UNIX/Linux:
     a. Switch to bash mode.
     b. Execute bi-init.sh.
5. Edit the config.txt file that you copied to *ORACLE_HOME*/biapps/biarpdutil/lib:

   ```
   RPD File Name <RPD file name>
   RPD Password <RPD pasword>
   RPD Database List <Comma separated list of database names in RPD physical layer
   for which the initialization block has to be enabled>
   ```

   The values in the repository database list must include all initialization blocks related to the source system that need to be enabled. Oracle BI Server must be included as a value in the repository database list if an initialization block that needs to be refreshed from the Oracle BI EE server is to be enabled.
6. Execute the ManageInitBlock.jar utility, located in *ORACLE_HOME*/biapps/biarpdutil/lib, using this command:

   ```
   java -classpath ManageInitBlock.jar oracle.apps.biarpdutil.ManageInitBlock
   >log.txt
   ```

   An output repository is generated. The file is named Output_RPD.rpd. All relevant initialization blocks are enabled in Output_RPD.rpd.
7. Deploy the Output_RPD.rpd to Oracle BI EE.

   To deploy an Oracle BI Repository, see Configuring Repositories in *System Administrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Trimming the Repository

Oracle BI Applications delivers a full repository with projects for all the BI Applications modules. This full repository is deployed to the Oracle BI Server. You can trim the repository so that it includes only the projects that are relevant to your deployment. Although optional, trimming the repository makes the Oracle BI Server startup process faster and also makes patching quicker.

> **Note:**
>
> The repository should not be trimmed for on-premises Fusion Applications sources. The full repository is required for ETL in these environments.

The steps for trimming the repository depend on the status of your deployment:

- If the repository has not been customized for your deployment: Extract the projects for the products that your organization has purchased. You don't need to perform a merge. See Extracting Projects From Full Repository.
- If the repository has been customized for your deployment: Extract the applicable projects from the full (delivered) repository, and, additionally, merge that repository with your customized repository. See Extracting Projects From Full Repository and Merging Repositories.

Extracting Projects From Full Repository

Use this procedure to extract projects from the full repository. The end result of this process is a trimmed repository.

To extract from the repository the projects for the products you have purchased:

1. Open a Command window on the computer where Oracle BI Administration Tool is installed.
2. If you installed Oracle BI EE on Windows, then run `bi-init.cmd` to launch a Command prompt that is initialized to your Oracle instance. This utility is located in:

   MW_HOME`\instances\instance<n>\bifoundation\OracleBIApplication\coreapplication\setup`

   If you installed the Oracle BI Administration Tool using the BI Client installer, then run `bi_init.bat` to launch a Command prompt that is initialized your Oracle instance. This file is located in:

   ORACLE_HOME`\oraclebi\orahome\bifoundation\server\bin`
3. In a Command prompt window, run `ExtractProjects`:
   - If you installed Oracle BI EE on Windows, ExtractProjects.exe is located in *ORACLE_HOME*`\bifoundation\server\bin`.
   - If you installed Oracle BI Administration Tool using the BI Client installer, ExtractProjects.exe is located in *ORACLE_HOME*`\oraclebi\orahome\bifoundation\server\bin`.

   Run one of these commands:

For extracting a single project:

```
ExtractProjects -B input_rpd -O output_rpd -I "project_name"
```

For extracting multiple projects:

```
ExtractProjects -B input_rpd -O output_rpd -I "project_name1" -I "project_name2"-
I "project_name3" (and so on)
```

where:

`input_rpd` is the name and path of the full (delivered) repository and from which you want to extract the project or projects (for example, `OracleBIApps.rpd`).

`output_rpd` is the name and path of the repository you want to create with the extracted projects (for example, `OracleBIAppsTrimmed.rpd`).

`project_name` is the name of the repository project you want to extract.

You will be prompted to enter the encryption password for the repository (input_rpd).

The list of projects in the repository includes:

- Financial Analytics Fusion Edition
- Human Resources Analytics Fusion Edition
- Marketing Analytics Fusion Edition
- Partner Analytics Fusion Edition
- Project Analytics Fusion Edition
- Sales Analytics Fusion Edition
- Supply Chain and Order Management Analytics Fusion Edition
- Student Information Analytics
- Service Analytics
- Price Analytics
- Manufacturing Analytics
- DataLineage_Project

> **Note:**
>
> The repository contains projects in addition to those listed above. These projects are included for future content delivery and upgrade support. To determine the Oracle BI Applications available in this release, see System Requirements and Supported Platforms for Oracle BI Applications.

4. Save and rename the trimmed repository. Make sure the name identifies this repository as one that has been trimmed, for example, `OracleBIAppsTrimmed.rpd`.

Merging Repositories

Use this procedure only if you have customized the repository and are subsequently trimming the repository.

1. In the Oracle BI Administration Tool, open in offline mode the trimmed Oracle BI Repository that you created in the procedure Extracting Projects From Full Repository, for example, `OracleBIAppsTrimmed`.rpd.
2. On the menu bar, click **File**, and then click **Merge**.
3. In the Select Original Repository dialog box, select the repository `OracleBIApps.`, which is the full repository.
4. Enter the password for the original repository, and then click **OK**.
5. Click **Select** for the Modified Repository field.

   The Select Modified Repository dialog opens.
6. Select the repository that contains the customizations you made to the repository file, for example, `OracleBIAppsCustom.`.
7. Click **Open**, and enter the password for the previously customized repository, and then click **OK**.
8. In the Decision drop-down list, select the action you want to take regarding the repository change, or accept the default action.
9. To locate subsequent rows with empty Decision fields, click the **Decision** header cell.

   After all rows have a value in the Decision field, the **Merge** button becomes enabled.
10. Click **Merge**.

    A message appears after the merge concludes successfully.
11. On the menu bar, click **File**, and then click **Save As**.

    Save the current repository using a new name, such as `OracleBIAppsFinal.rpd`.

Trimming the ODI Repository

Trimming the ODI repository makes the repository more responsive and enables quicker patching.

Trimming content is not suggested as a best practice after deployment. This is just guidance if you are experiencing issues (such as ODI export/import taking long time) due to the large size of the ODI repository. To trim the ODI repository, see My Oracle Support document (ID 1970123.1) titled *Trimming BI Apps ODI Repository*.

Next Steps After Setup — Functional Configuration

After you complete the setup tasks, Oracle BI Applications is ready for functional configuration, which is accomplished using Configuration Manager and FSM.

> **Note:**
>
> If you are deploying data fromOracle Fusion Applications Cloud source system, complete the tasks in Setting Up Fusion Applications Cloud Data Sources before performing functional configuration.

To enable functional configuration, you must provide the Configuration Manager URL to your implementation managers and functional developers. To learn about the functional configuration process for Oracle BI Applications, see *Oracle Business Intelligence Applications Configuration Guide*.

In addition, for Oracle Fusion Applications sources, after Oracle BI Applications analyses and dashboards have been tested and the data validated, the Oracle BI Applications system administrator will need to inform the Oracle Fusion Applications Administrator to enable the appropriate embedded analyses and dashboard (ADR) regions in Oracle Fusion Applications. The ADR regions are enabled using FSM for Oracle Fusion Applications.

5

Setting Up Fusion Applications Cloud Data Sources

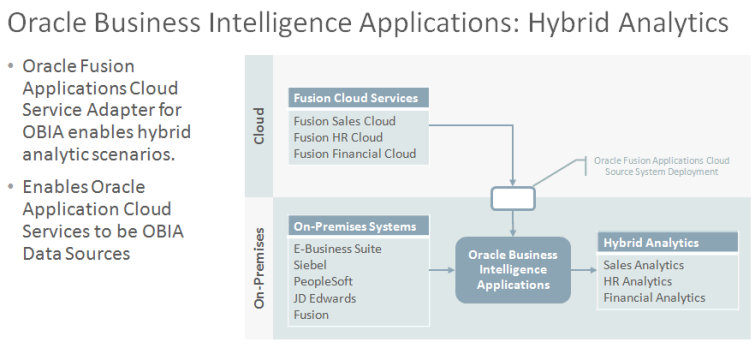
Follow these procedures to deploy Oracle Business Intelligence Applications (Oracle BI Applications) with a Fusion Applications Cloud data source.

Topics:

Overview of Oracle Fusion Applications Cloud Source System Support

You can enable your on-premises deployment of Oracle BI Applications to consume data from your Fusion Cloud Services, providing you with a comprehensive set of analytics that span your on-premises and cloud service systems to give you a complete view of your business.

Along with the many supported on-premises source business systems, support for Oracle Fusion Applications Cloud Services enables a robust hybrid analytics solution to deliver the complete picture regardless of where the data originates.



You can securely connect your on-premises Oracle BI Applications deployment to your Oracle Fusion Applications Cloud Service, which automates the flow of data from your source system to your Oracle Business Analytics Warehouse, enabling your hybrid analytics solution.

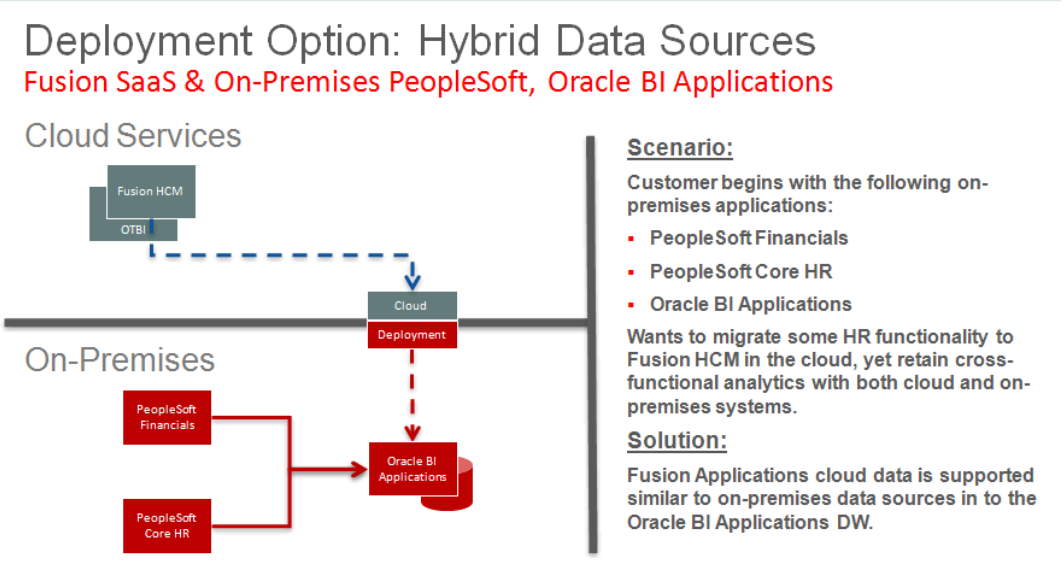
Key features include:

- Extracts are from VOs and not direct from DB.
- Leverages Standard Security Methods of Source Cloud Systems to secure data in-transit.

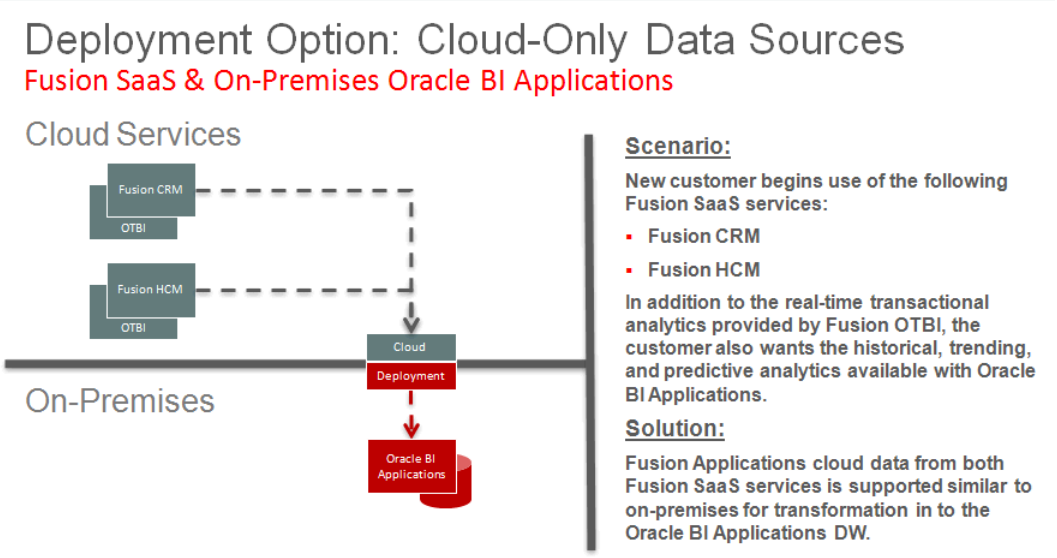
Fusion Applications Cloud Source System Deployment Options

When migrating to the Cloud, you can enable your on-premises deployment of Oracle BI Applications to consume data from your Fusion Cloud Services using these deployment options.

Hybrid Data Sources Category



Cloud-Only Data Sources



Fusion Application Cloud Source System Deployment Roadmap

You can deploy a Fusion Applications Cloud data source to your on-premises deployment of Oracle BI Applications.

Prerequisites for deployment:

- Oracle BI Applications 11.1.1.10.2
- Oracle Cloud Applications Release 11.1.9.2, 10, 11, 12, and 13

To deploy a Fusion Applications Cloud data source:

1. Create a service request to deploy Oracle BI Cloud Connector Console (BICCC) on your Fusion Applications pod if you are deploying Fusion Applications Release 9.2 data source. If you are deploying Fusion Applications Release 10 or Release 11 data source, then create a service request to review sizing of your Fusion Applications pod for Oracle BI Cloud Connector Console usage. See Create Service Requests for Oracle BI Cloud Connector Console.
2. Provision a new or existing Fusion Applications user with export and import privileges for Oracle Business Intelligence. See Provision a User For Export and Import of BI Data from Fusion UCM.
3. Provision a User for Oracle Business Intelligence Cloud Connector Access.
4. Register the Fusion Applications Source.
5. Create a Load Plan and Specify Offerings and Fact Groups to Load.
6. Extract Data into Universal Content Management using BI Cloud Connector Console.

7. Synchronize Deletes in Your Cloud Extract.
8. Configure Proxy Settings for WebLogic Server. If you have already configured WebLogic server to allow any external connection, then you can skip this step.
9. Set up the Key Flex Fields before you execute the load plan (created in the step 5) if you are deploying Key Flex Fields for Financials. See Setting Up Key Flex Fields for Financials Fusion Applications Source Data.
10. Set Up Key Flex Fields for HCM Fusion Applications Source Data.

Creating Service Requests for Oracle Business Intelligence Cloud Connector Console

Create applicable service requests depending on whether you are deploying Oracle Fusion Applications Release 10, 11, 12, or 13 data sources.

For Oracle Fusion Applications Release 10, 11, 12, and 13 Data Sources

If you are deploying Oracle Fusion Applications Release 10, 11, 12, or 13 data sources, then log in to My Oracle Support (support.oracle.com) and create a service request to review sizing of your Oracle Fusion Applications pod for Oracle BI Cloud Connector Console usage. When the service request is received, the Oracle Cloud Services team will review the available disk space and UCM tablespace on the applicable Oracle Fusion Applications pod and increase the space as required.

> **Note:**
>
> In Oracle Fusion Applications Release 10 and higher, Oracle BI Cloud Connector Console is automatically deployed and no separate service request is required to deploy it.

Log a service request, and specify the following details:

- Action: Review sizing for BICCC
- Problem type: Specify this information:
  - Service Type: **Oracle Fusion Global Human Resource Cloud Service**
  - Problem Type: **Hosting Services – Application**
  - Sub-Problem Type: **Review sizing for BICCC**
  - BIA Deployment: **On-premise**
  - User ID: <User ID for Business Intelligence Cloud Connector Console (BICCC) access>
  - FA POD details: <*POD ID*>
  - FA POD: <Stage and Production>
- Inputs: This service request initiates the review of available disk space and UCM tablespace on the applicable Fusion pod. Provide the Oracle Fusion Applications POD details in the service request. This must include the POD identifier (the URL used to access the Fusion environment).

When the service request is resolved, Oracle Cloud Services provides you with the UCM Server and Oracle BI Cloud Connector Console URLs.

Provisioning a User for Export and Import of BI Data from Fusion UCM

Provision a new or existing user in Oracle Fusion Applications with privileges to download data from Fusion Universal Content Management (UCM).

This task is a part of the Fusion Applications Cloud Source System Deployment Roadmap.

To provision a user for Fusion access:

1. Create a new user, or use an existing user in Oracle Fusion Applications that has privileges to download data from Fusion UCM.
2. Using Oracle Authorization Policy Manager (APM), assign the following application role to the applicable new or existing user:

Application Role	Display Name
OBIA_EXTRACTTRANSFORMLOAD_RWD	Upload and download data from on-premises system to cloud system

Provisioning a User for Oracle BI Cloud Connector Console Access

Use these steps to provide additional users access to the Oracle BI Cloud Connector Console (BICCC) user interface.

The service request that you created to deploy the Oracle BI Cloud Connector Console performs the setup for the identified user. See Creating Service Requests for Oracle Business Intelligence Cloud Connector Console. Complete these steps only if additional users need to access the console.

For Oracle Fusion Applications Release 10 and 11 Data Sources

To provision a user for Oracle BI Cloud Connector Console access:

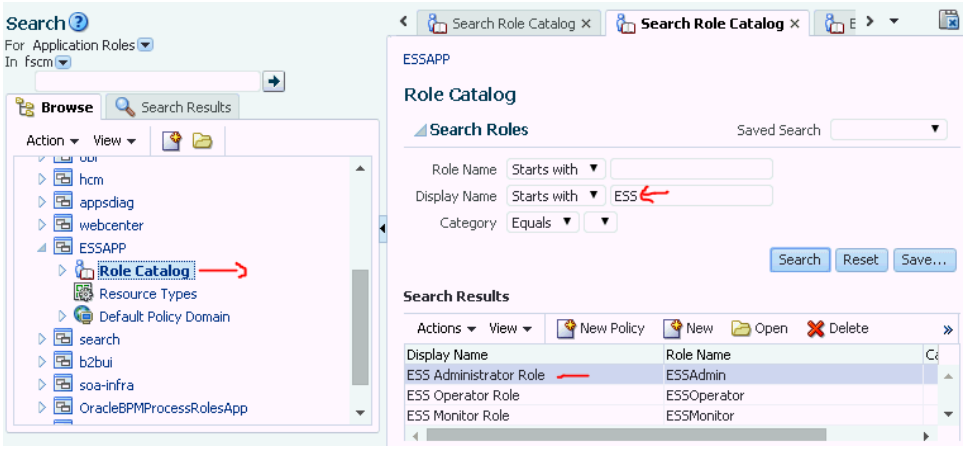
1. Using Oracle Authorization Policy Manager (APM), assign ESSAPP stripe, Application role – `ESSAdmin` (this is for the ability to schedule and monitor the BI connector ESS jobs) to the applicable new or existing user:

> **Note:**
>
> If you are accessing APM to complete this assignment, you must have the service administration privileges.

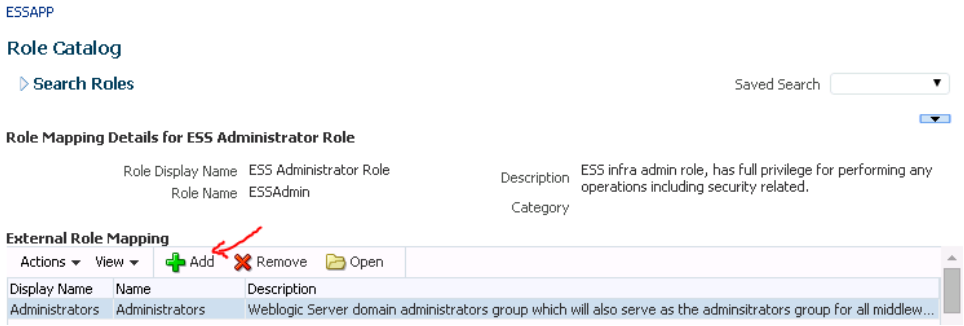
   a. Log into APM.

b. Click **Applications**, click **ESSAPP**, and then select **Role Catalog**.

c. Search for the application role name beginning ESS and select the **ESSAdmin** role (Display Name is ESS Administrator Role) in the Search Results section.



d. Go to the External Role Mapping section and click **Add** to assign users to this role.



2. Similarly, using APM, search for the application role `BIA_ADMINISTRATOR_DUTY` and add the external role `ORA_ASM_APPLICATION_IMPLEMENTATION_ADMIN_ABSTRACT` to this duty role.

   a. Log into APM.

   b. Click **Applications**, click **OBI**, and then select **Role Catalog**.

   c. Search for the `BIA_ADMINISTRATOR_DUTY` application role.

   d. Select it in the Search Results area and double-click it or click **Open** to display the page for the application role.

   e. In the External Role Mapping region, click **Add** to display the Add a Role dialog. Use this dialog to search for the external role, `ORA_ASM_APPLICATION_IMPLEMENTATION_ADMIN_ABSTRACT`.

   f. Click **Map Roles**.

3. Using Oracle Identity Manager (OIM), assign OBI stripe, Enterprise Role – `ORA_ASM_APPLICATION_IMPLEMENTATION_ADMIN_ABSTRACT` (this is for the ability to access the user interface of Oracle BI Cloud Connector Console) to the applicable new or existing user:

> **Note:**
>
> Search for `ORA_ASM_APPLICATION_IMPLEMENTATION_ADMIN_ABSTRACT` in OIM using the Application Implementation Administrator role display name or use the Advanced Search in Roles page to search for this role.

For Oracle Fusion Applications Release 12 and 13 Data Sources

Use the Security Console in Oracle Fusion Applications to create an administrative role that inherits the Oracle BI Cloud Connector Console privileges from existing roles and assign the user to that role.

To provision a user:

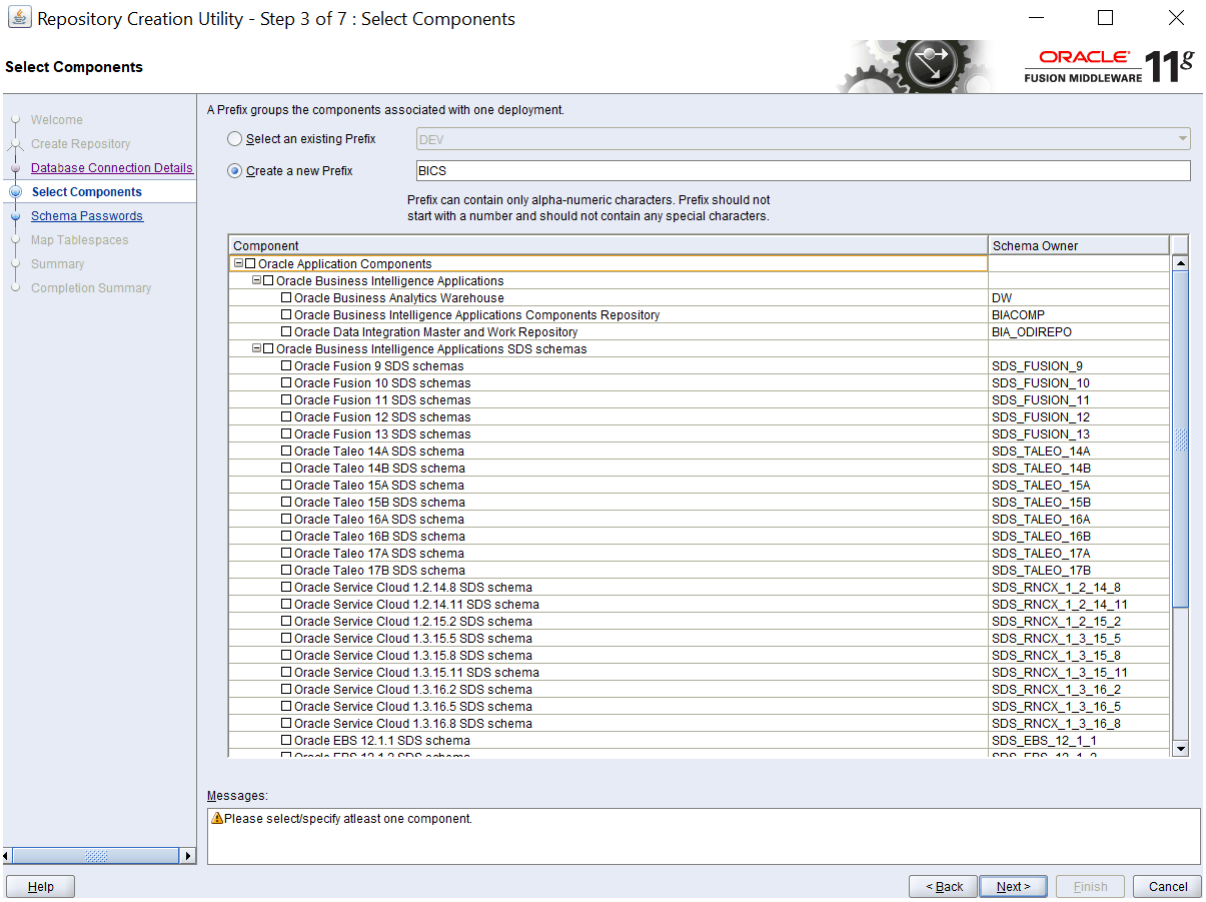
1. In Oracle Fusion Applications, navigate to the **Security Console** in the Navigator.
2. In the Security console, create a BICC_ADMIN role.
   a. Click **Create Role**.
   b. In the Basic Information page, enter the following values and click **Next**.
      i. **Role Name**: `BICC_ADMIN`
      ii. **Role Code**: `BICC_ADMIN`
      iii. **Role Category**: `BI – Abstract Roles`
   c. Click the **Add** icon in the Role Hierarchy list.
   d. In the Add Role Membership dialog, search for ESS.
   e. In the search results, confirm that the ESS Administrator role is displayed and then click **Add Role Membership**.
   f. Search for `ORA_ASM_APPLICATION_IMPLEMENTATION_ADMIN_ABSTRACT` and click **Add Role Membership**.
   g. Search for `OBIA_EXTRACTTRANSFORMLOAD_RWD` and click **Add Role Membership**.
   h. Close the Add Role Membership dialog.
   i. Click **Next**.
   j. In the Users page, click **Add User**.
   k. In the Add User dialog, search for the name of the user you want to assign access to, and then click **Add User to Role**.
   l. Close the Add User dialog.
   m. Click **Next**.
   n. Click **Save** and close.

Register the Fusion Applications Source

Register the Oracle Fusion Applications source.

Ensure that the applicable SDS schemas have been created during installation and configuration of Oracle BI Applications. For Oracle Fusion Applications cloud source systems, ensure that you select the Oracle Fusion 11 SDS schema in the Select

Components dialog of Oracle Fusion Middleware Repository Creation Utility as seen in the following image:



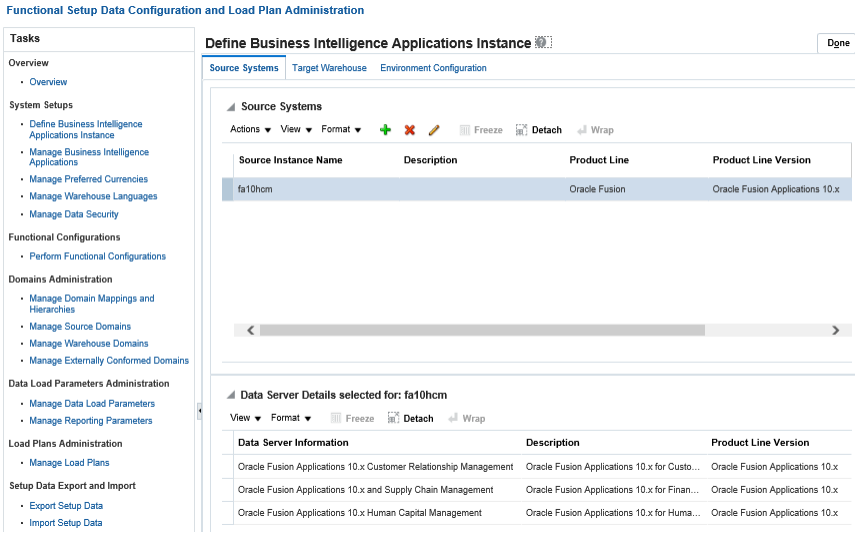
See Creating Schemas Using Business Analytics Applications Suite RCU

> **Note:**
>
> If you have not created the applicable SDS schemas during installation and configuration of Oracle BI Applications, then you can create them as a post-installation step. See Creating SDS Schema Post Installation

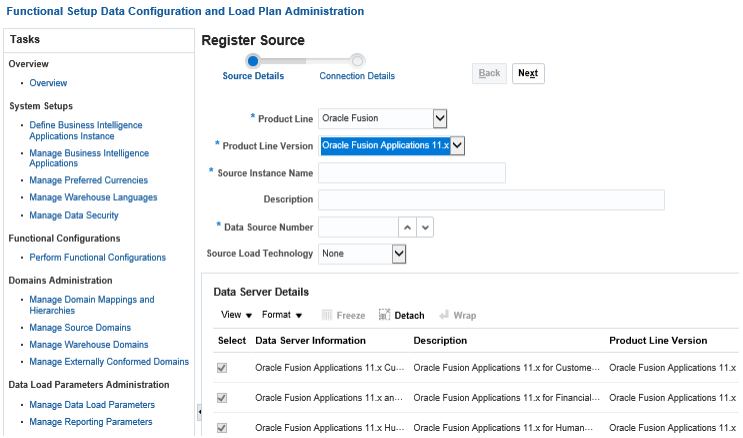
This task is part of the Fusion Applications Cloud Source System Deployment Roadmap.

To Register the Oracle Fusion Applications Source:

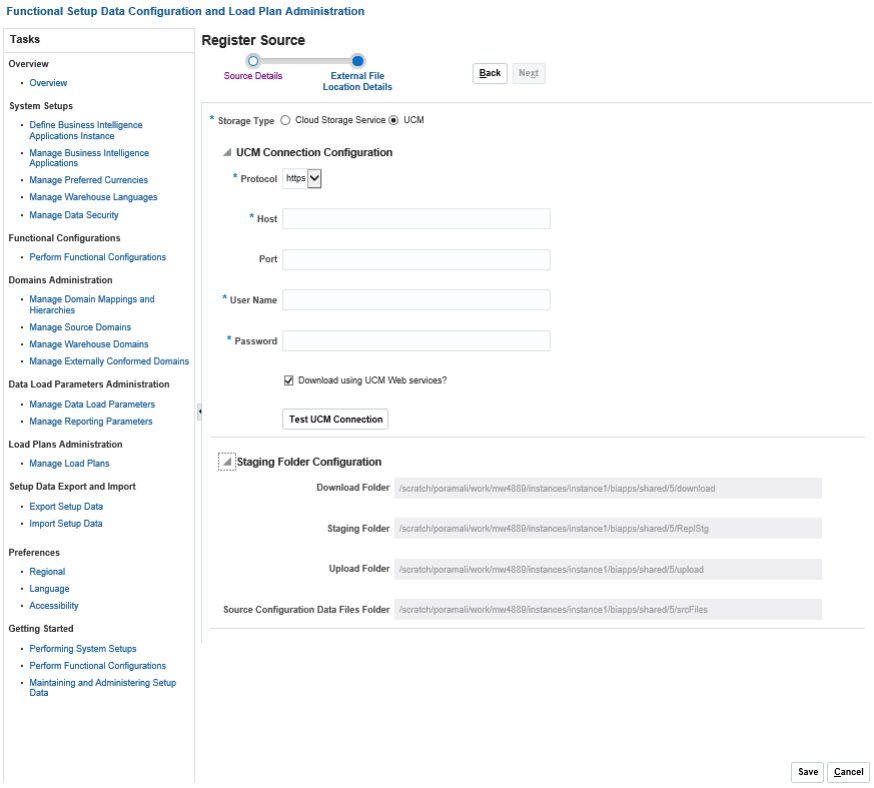
1. Log in to Oracle BI Applications Configuration Manager as a user that has Enterprise Role - **ASM_APPLICATION_IMPLEMENTATION_ADMIN_ABSTRACT**.
2. In the Tasks pane under System Setups, select the **Define Business Intelligence Applications Instance** link to display the Source Systems tab.



3. Click the **Add** icon (**+**) to display the Register Source dialog.



4. In the Register Source in Configuration Manager page, specify this information:
   - In the Product Line drop-down list, select **Oracle Fusion**.
   - In the Product Line Version, select the Oracle Fusion version being used.
   - In the Source Instance Name field, specify a unique name to identify the source system.
   - Optionally, in the Description field, enter a short description to help administrators and implementers identify and use this data source in Configuration Manager.
   - In the Data Source Number field, enter an integer or use the spinner to specify a number to identify data in the Oracle Business Analytics Warehouse. This number must be unique within Configuration Manager.
   - In the Source Load Technology, select `ODI External File` to define the cloud adapter mode.
5. Click **Next** to display the external file location details.
6. In the External File Location Details dialog, select the **UCM** button, specify the following details, then click **Save**:



a. Protocol – Select https.

b. Host and Port – Specify the host and port details provided by the Oracle Cloud Services in your service request when it is closed.

c. User Name and Password – Specify the user name and password of the user that you provisioned for export and import of BI data from Fusion Universal Content Management server. See Provisioning a User for Export and Import of BI Data from Fusion UCM.

d. Download using UCM Web Services? – Do not change default selection.

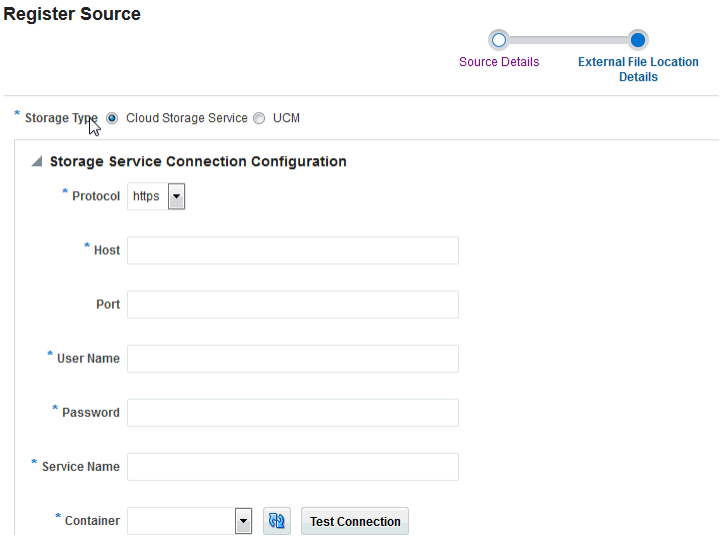
e. Download Folder – auto-populated. Do not change the default value.

f. Staging Folder – auto-populated. Do not change the default value.

g. Upload Folder – auto-populated. Do not change the default value.

h. Source Configuration Data Files Folder - auto-populated. Do not change the default value.

Storage Service account is not provisioned by BI Apps and this option is only applicable when you have a Storage service account and choose to use that as external storage for Fusion BI data. If you meet this criteria, then in the External File Location Details dialog, select the **Cloud Storage Service** button, specify the following details, then click **Save**:



a. Protocol – Select https.

b. Host – Specify the host details provided by the Oracle Cloud Services in your service request when it is closed. For example, `storage.us2.oraclecloud.com`.

c. Port- Specify the port details provided by the Oracle Cloud Services in your service request .

d. User Name – Specify the Oracle cloud account user name that will be used to authenticate the Storage Servcie.

e. Password- Enter the password for the Oracle cloud user account name that you specified in the **User Name** field.

f. Service Name- Identifies the specific service to upload files to. This is a concatenation of the service name and the identity domain, separated by a dash, for example: `storageservicename-identitydomainname`. You can obtain this service name from the Service REST Endpoint data field in the storage service's details area in Oracle Cloud My Services. It is the last part of the address, after the last forward slash.

g. Container- Name of the container to upload data to in the storage service. This should be the same container specified in Configuration Manager where the Fusion data source was registered (that is, in Configuration Manager navigate to `System Setups\Define Business Intelligence Applications \Source Systems` tab.

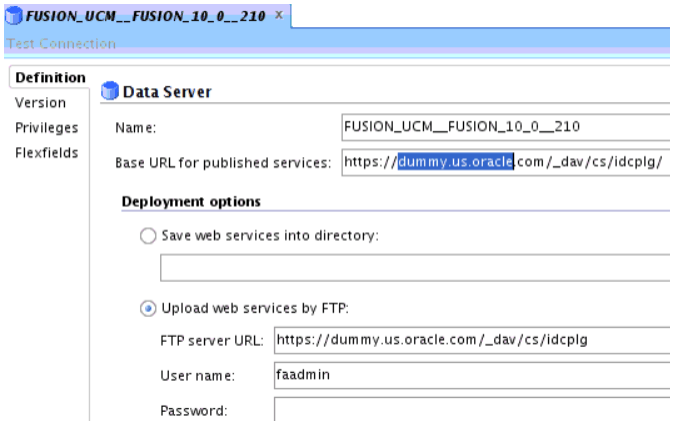
> **Note:**
>
> You can register both Fusion 10 and Fusion 11 with UCM or register both with Cloud Storage Service. If you register Fusion 11 with UCM, you can not register Fusion 10 with Cloud Storage Service. For Fusion, support is provided only for one technology.

Configuring Oracle Universal Content Management URL for Federated SSO

Use this procedure only if you have Fusion Applications identity provider for Federated SSO and are subsequently updating the Oracle Universal Content Management (UCM) URL for that.

After you register the Fusion source using Oracle Business Intelligence Configuration Manager, and configured to use UCM as the External Storage, Oracle Business Intelligence Configuration Manager creates a physical schema in Oracle Data Integrator for the UCM connection.

1. Sign into Oracle Data Integrator Studio.
2. Open the data server registered for the Fusion source under UCM.



3. In **Base URL for published services** update the URL to `https://<host : port>/_dav/cs/idcplg`

> **Note:**
>
> The **Test Connection** button in Oracle Business Intelligence Configuration Manager won't work in this case, as it still tries and forms the URL using the old URL in Oracle Business Intelligence Configuration Manager. Nevertheless, the UCM download goes through fine as it uses the URL that you specified in Oracle Data Integrator.

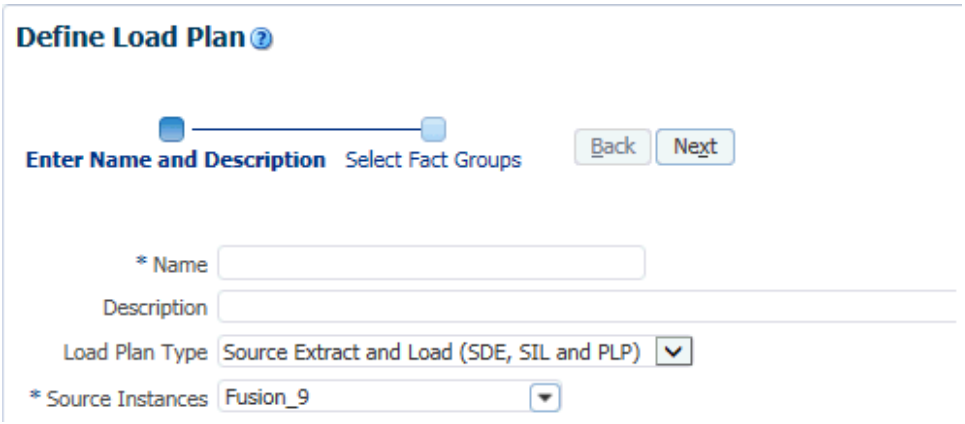
Creating a Load Plan and Specifying Offerings and Fact Groups to Load

Create a load plan and specify offerings and fact groups to load.

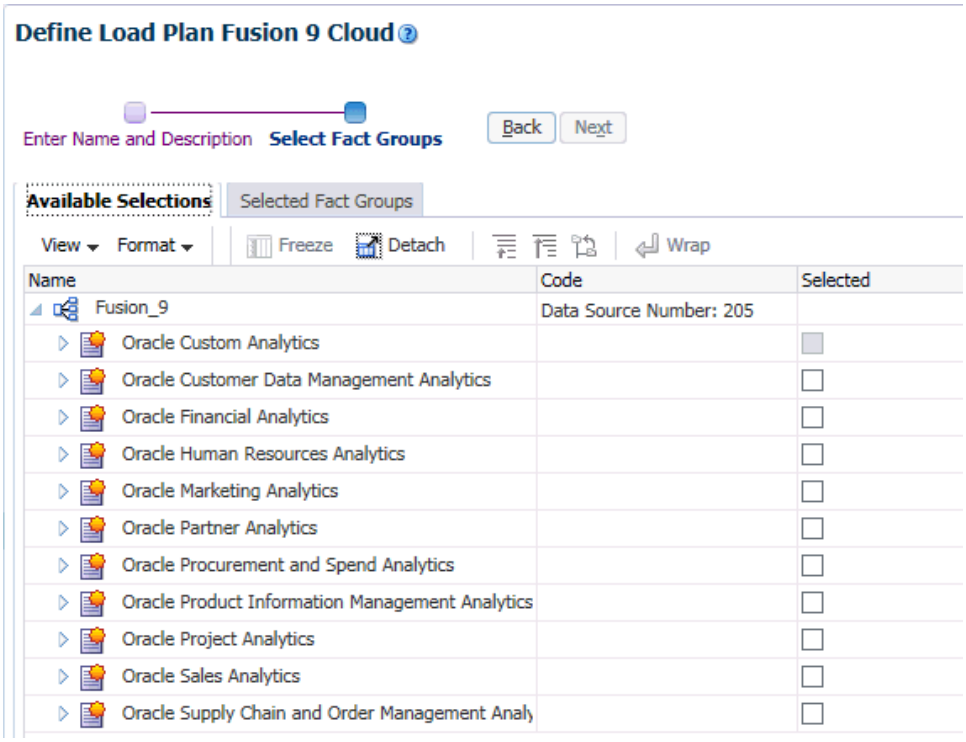
To create a load plan:

1. In the Tasks pane, click **Manage Load Plans** to display the Load Plans dialog.

2. Click **Add (+)** to display the Define Load Plan dialog.



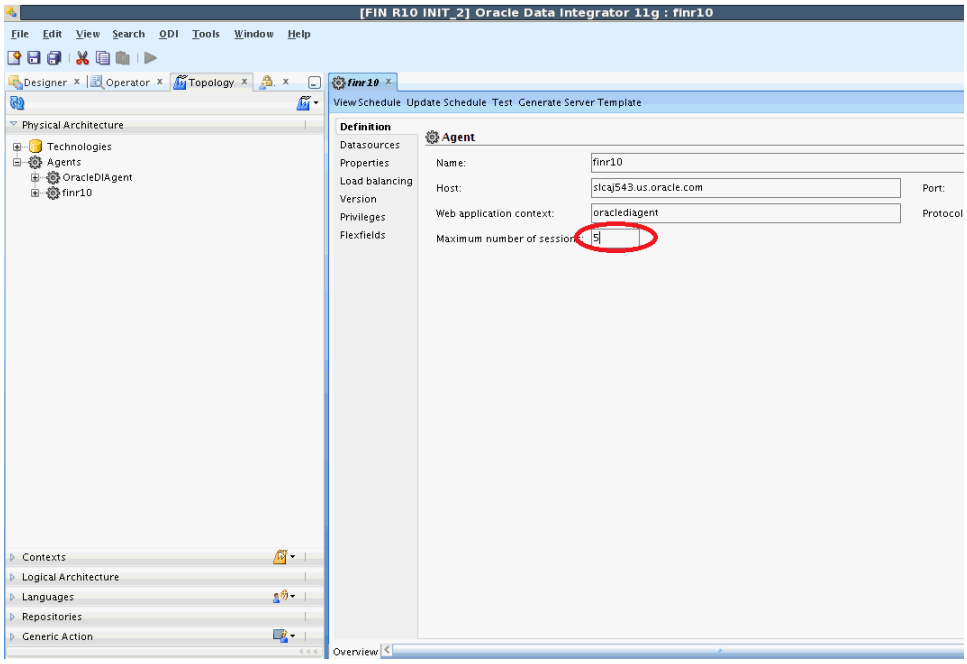
3. Use the Name field to specify a unique name, and in the Source Instances drop-down list select the Fusion source, then click **Next** to display the Select Fact Groups page.
4. Select applicable offerings and fact groups.



5. Click **Save**.
6. In the list of Load Plans, select the new load plan, and click **Generate**.

Setting up ODI Agent Concurrent Sessions
For optimal performance, set the maximum number of sessions for Oracle Data Integrator (ODI) Agent to no more than five. To set up the maximum number of sessions supported by an agent:

1. Log into ODI Studio.
2. Display the **Topology** tab, and navigate to the **Physical Architecture** tab.
3. Expand **Agents** and select the applicable ODI Agent.



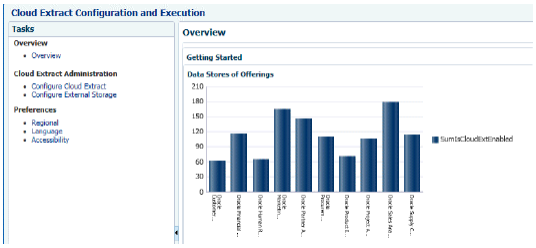
4. In the agent details pane, set the maximum number of sessions supported by the agent as 5. If you are creating a new agent, then ensure that you set the maximum number of sessions supported by the agent as 5.

Extracting Data into Universal Content Management using Oracle BI Cloud Connector Console

You can extract data from your cloud source into the Universal Content Management (UCM) server using the Oracle BI Cloud Connector Console (BICCC).

Use the Oracle BI Cloud Connector Console URL provided to you in the SR that you logged to deploy Oracle BI Cloud Connector Console and the login details of the applicable user to log into this console. See Create a Service Request to Deploy Fusion Applications Cloud Source System Data, Provision a User For Export and Import of BI Data from Fusion HCM, Provision a User for Oracle Business Intelligence Cloud Connector Access

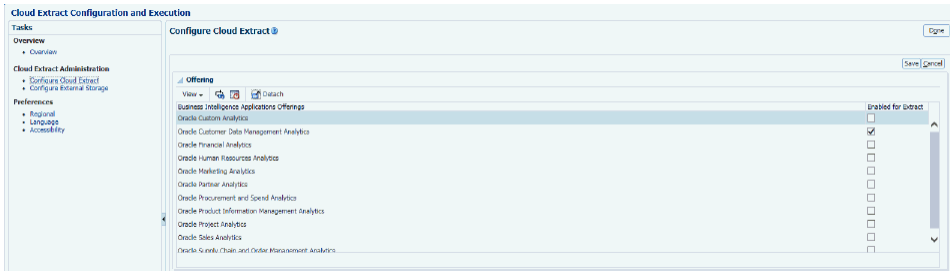
You can also start Oracle BI Cloud Connector Console using a HTTP URL based on the following format: `http://<FA OHS Host>:<FA OHS Port>/biacm`



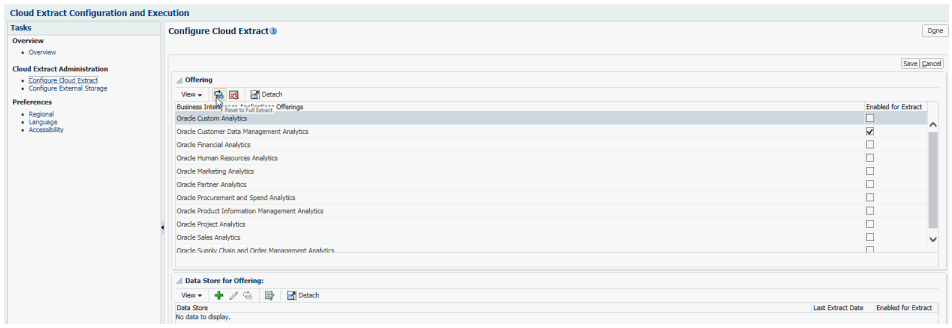
To extract data from a cloud source to UCM:

> **Note:**
>
> Oracle BI Applications on-premises users must extract data to UCM.

1. From the landing page, select the **Configure Cloud Extract** link on the Tasks bar.
2. In the list of Offerings, select the check box next to the Cloud source system functional areas that you want to deploy.

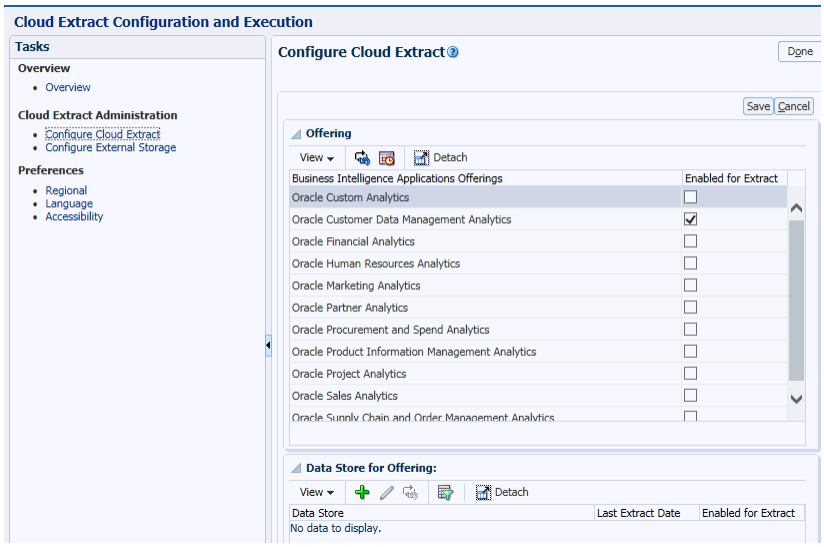


3. Click **Save**, then **Done**
4. To reset the last extract date so that a full data load is performed at the next load for the selected Offering, instead of an incremental load, click **Reset to Full Extract** icon in the tool bar and click OK when the application displays the warning message. You typically use this option if your business requirements have changed or if fact data has been corrupted. You can reset to full extract at offering and VO level.

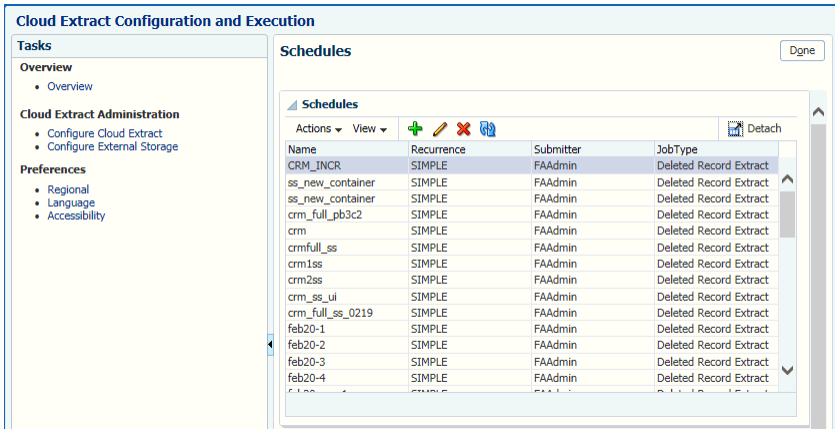


> **Note:**
>
> You set up a Scheduled Load Plan in Oracle BI Applications Configuration Manager (BIACM) to extract from UCM server into Oracle Business Analytics Warehouse. To reset the extraction on Oracle Business Analytics Warehouse, use the BIACM option: Manage Load Plans\Execute\Execute Reset Data Warehouse Scenario. See Manage Load Plans Toolbar Options in *Oracle Business Intelligence Applications ETL Guide*.

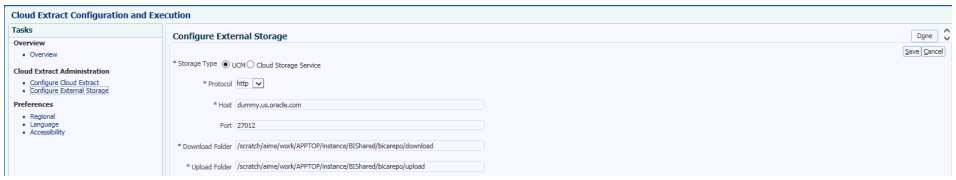
5. To schedule the extract, click the **Schedule** icon in the tool bar.



6. Click the **+** icon to create a new schedule.



7. Specify when you want to perform the cloud extract.
8. Click **Schedule**, then **Done**.
9. Click the **Configure External Storage** link on the Tasks bar.
10. Select **UCM** as the storage type.



11. View the configuration information displayed on this page and click **Save**, then **Done**.

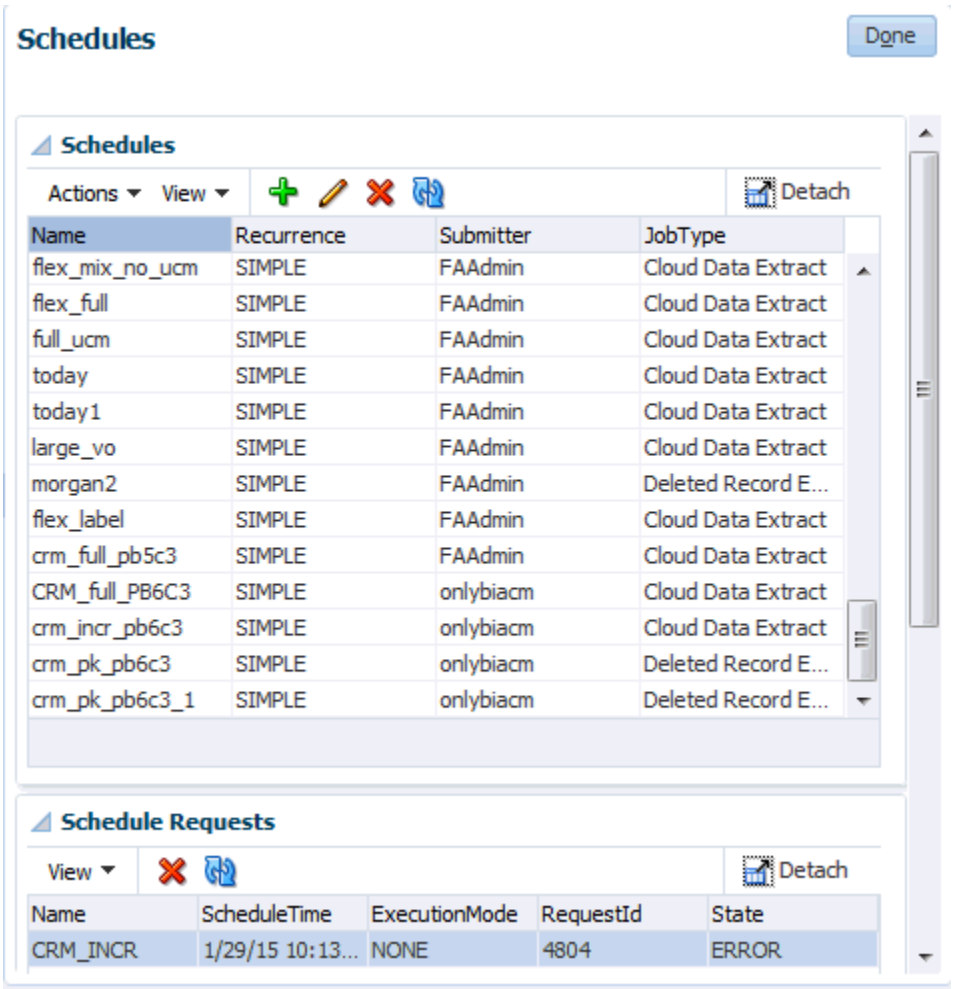
Synchronizing Deletes for a Cloud Extract

If you are loading data into the Universal Content Management (UCM) server using a Cloud Extract, then you use Oracle BI Cloud Connector Console (BICCC) to synchronize deletes in the source system with deletes in the Cloud Extract data.

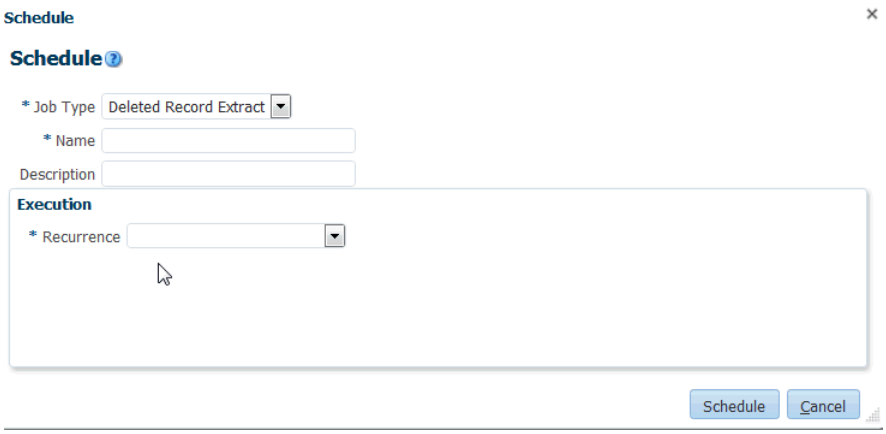
Before you start, log into Oracle BI Cloud Connector Console using the Web link and user name supplied to you by Oracle Cloud Support. You can also start Oracle BI Cloud Connector Console using a HTTP URL based on the following format: http://*<FA OHS Host>*:*<FA OHS Port>*/biacm.

To synchronize your Cloud Extract data:

1. Select the **Configure Cloud Extract** link on the Tasks pane.
2. Click the Manage Extract Schedules icon ( ) to display the Schedules dialog.



3. Click the Add icon ( ) to create a new schedule.
4. Use the **Name** field to specify a short name to identify this schedule in Oracle BI Cloud Connector Console.



5. Select 'Deleted Record Extract' from the **Job Type** drop down.
6. Use the **Recurrence** drop down to specify when you want to synchronize the data.

   You typically schedule the synchronization to run at a time when the load on the Fusion Applications source system is low, for example, during off-peak hours. In addition, you must schedule the synchronization so that it does not conflict with the Cloud Extract or the data load into the Oracle Business Analytics Warehouse.
7. Save the details.

Configure Proxy Settings for WebLogic Server

To use external web services or HTTP data sources when Oracle BI Applications is configured behind a firewall or requires a proxy to access the internet, you must configure Oracle WebLogic Server to allow the web service requests and to be aware of the proxy.

This task is part of the Fusion Application Cloud Source System Deployment Roadmap.

Define the proxy host and the non-proxy hosts to WebLogic ODI managed server (ODI_server1) by setting the following parameters:

- -Dhttp.proxyHost - specifies the proxy host. For example:

  ```
  -Dhttp.proxyHost=www-proxy.example.com
  ```
- -Dhttp.proxyPort - specifies the proxy host port. For example:

  ```
  -Dhttp.proxyPort=80
  ```
- -Dhttp.nonProxyHosts - specifies the hosts to connect to directly, not through the proxy. Specify the list of hosts, each separated by a "|" character; a wildcard character (*) can be used for matching. For example:

  ```
  -Dhttp.nonProxyHosts="localhost|*.example1.com|*.example2.com
  ```

To set these proxy parameters and the Web service configuration for your WebLogic Server, update the WebLogic setDomainEnv script:

1. Open the setDomainEnv script (.sh or .bat) in the `MW_HOME/user_projects/domains/DOMAIN_NAME/bin/` directory.

2. Enter the following parameters:

```
EXTRA_JAVA_PROPERTIES="-Dhttp.proxyHost=www-proxy.example.com -
Dhttp.proxyPort=80 -Dhttp.nonProxyHosts=localhost|*.mycompany.com|
*.mycorporation.com|*.otherhost.com ${EXTRA_JAVA_PROPERTIES}"
export EXTRA_JAVA_PROPERTIES


EXTRA_JAVA_PROPERTIES="-
Djavax.xml.soap.MessageFactory=oracle.j2ee.ws.saaj.soap.MessageFactoryImpl
-Djavax.xml.soap.SOAPFactory=oracle.j2ee.ws.saaj.soap.SOAPFactoryImpl -
Djavax.xml.soap.SOAPConnectionFactory=oracle.j2ee.ws.saaj.client.p2p.HttpSOAPC
onne ctionFactory ${EXTRA_JAVA_PROPERTIES}"
export EXTRA_JAVA_PROPERTIES
```

where:

`www-proxy.example.com` is an example proxy host.

80 is the example proxy port.

`localhost|*.mycompany.com|*.mycorporation.com|*.otherhost.com` are example non-proxy hosts.

Managing Fusion Flex Extensions in Release 11.1.1.10.2

This section applies to the BI Applications Release 11.1.1.10.2 and to Fusion 10 and 11.

The warehouse tables, by default, carry a limited number of extension columns. For char type columns there are usually around 30 char columns in the warehouse tables that can be used for extensions. At times there could be cases where you end up with more than 30 columns. In such a case, only 30 columns would get mapped for extensions while the remaining columns get loaded in the SDS.
This section explains the current options available in such a case and provides a way by which you can control the columns that should get mapped rather than just let the algorithm decide which columns should get mapped.

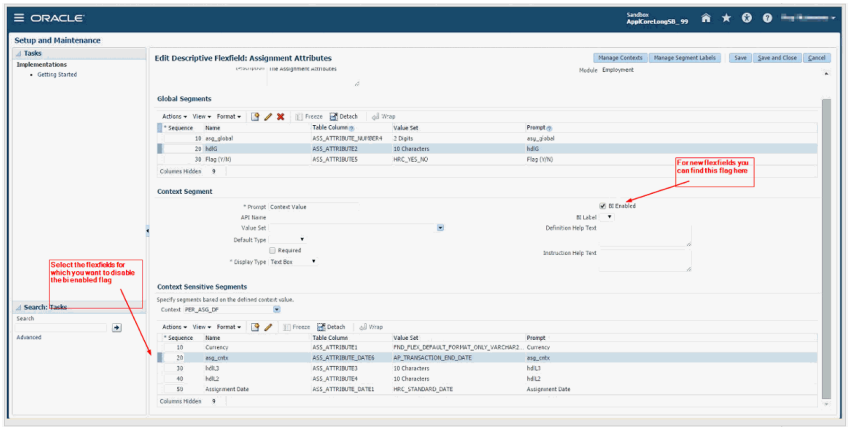
Option 1: Using the BI Applications Enabled Flag on the Fusion side

This is the recommended approach.

If all the flexfields you defined on the VO are not relevant for BI Applications, you can restrict the flex extensions in BI Applications to only those that are relevant to BI Applications, by following these steps:

1. Enable the **BI Enabled** option.

   When you define a flex field in Fusion, you see the **BI Enabled** option. Enabling this option ensures that this flex field gets extended to the repository and eventually flows into the BI Applications. If however some columns are not required for BI Applications, then you can disable this option for those columns.



2. On editing the selected flex field, you can see the option for existing flexfields. Disable the option for the ones that are not required for BI Applications.

> **Note:**
>
> Disabling the **BI Enabled** option disables it for OTBI as well. Disable this option only if it is not required for OTBI as well as B IApplications. There is no current way to disable it only for BI Applications.

3. After disabling the option, wait till the BI Extender runs again to update the repository. Post that schedule, run a full extract, and do a full load again. Drop the SDS tables and reset the warehouse (using the option in the Configuration Manager) before running the full load.

Option 2: Specifying a Column Exclude List in ODI Repository:

If Option 1 is not feasible, then try this option. The Extension framework in BI Applications looks at the ODI repository to identify which columns are extension columns. A workaround is to add the extension columns you do not need in BI Application, to the ODI repository against the VO. This way the extension framework treats them as regular columns and not extension columns.

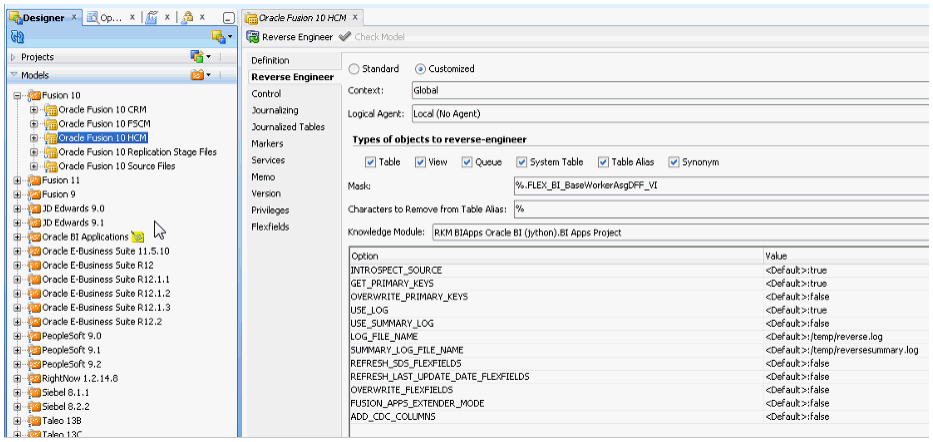
Based on your use case, follow either of these intructions:

- You have access to the extended Fusion repository
- You do not have access to the extended Fusion repository

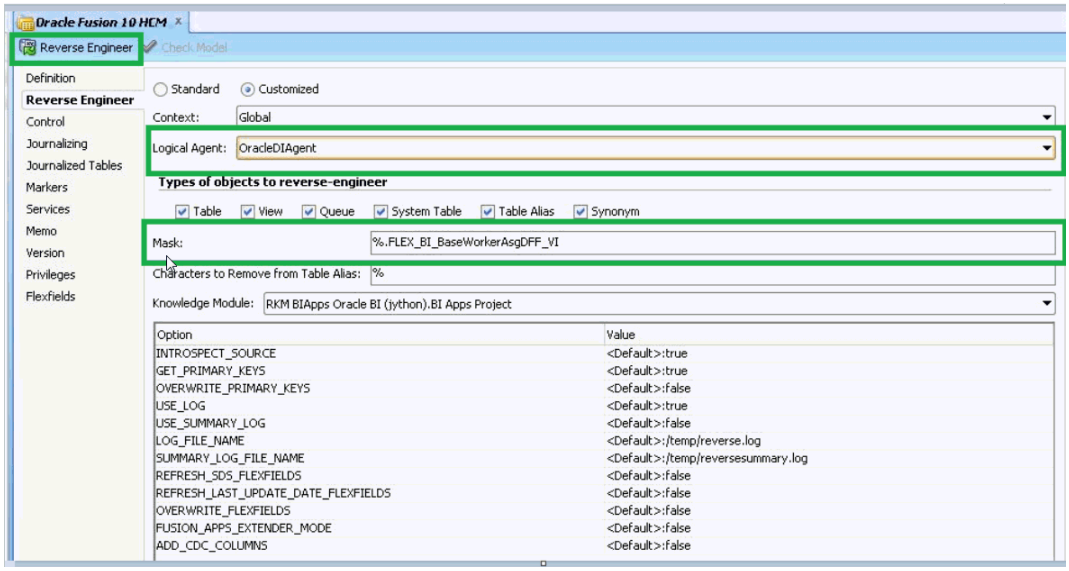
If you have access to the Fusion source repository from your ODI environment, follow these steps:

1. Run the Oracle BI Applications reverse knowledge module (RKM).
2. Login to the ODI repository using the ODI studio and navigate to the **Models** tab and open Oracle Fusion 10 HCM model as shown below.

> **Note:**
>
> The Fusion Connection should be specified pointing to the BI Server with the extended repository.



3. Set the **Mask** property to`%.FLEX_BI_BaseWorkerAsgDFF_VI` as shown below. This prevents attempting to refresh the model for all the VOs inadvertently.
4. Click **Reverse Engineer** to bring all the VO's extension columns into the model.



5. Once you see all the extension columns against the VO's definition, identify the extension columns that are needed for your business, and then delete those columns which you required from the data store.

   For Example, if SE_HRBP_ extension column is needed for your business, delete it and save the changes.

   For the remaining extension columns which you do not need and if you do not want the column to be populated or created in SDS, then use the flexfield OBI Populate Column in SDS to do so.
6. Edit the flexfield value (by default the flexfield value is be set to **Y**) and set the value as **N** and save the changes.

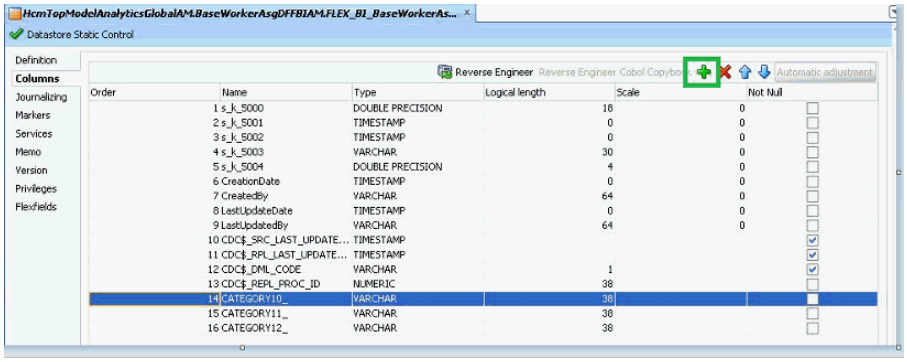
If you do not have access to the fusion source repository from your ODI Environment, follow these steps:

In this case, since you do not have access to the fusion source environment, there is no way to run RKM to reverse engineer a VO to add all extensible columns to it.

Hence you should add all unused extensible columns manually against a VO's data store.

> **Note:**
>
> In Fusion 10, the extractor provides mdcsv files which will contain the metadata of the extended columns. Refer to that mdcsv file when you are manually adding the columns in the ODI.

1. Login to the ODI repository using the ODI studio and navigate to the **Models** tab, find the data store, and open it as shown below.



2. Click **Add** to add columns. Choose the correct data type, length and other options and save the changes.

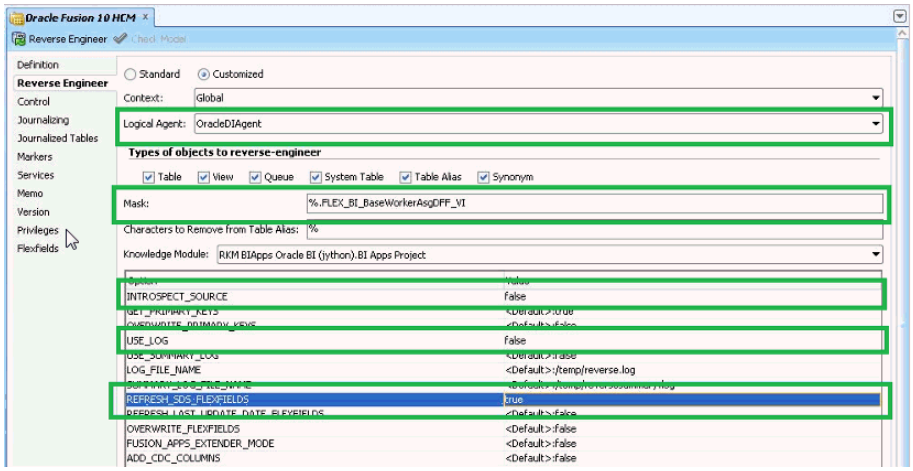
   If you do not want the column to be populated or created in the SDS, then use the flexfield OBI Populate Column in SDS to do so.

3. Edit the columns and go to the **Flexfields** tab. By default, the flexfield value is set to **Y**. Edit the flexfield value and set the value as **N** and save the changes.

4. Run the RKM to update the newly added extensible column's short name.

5. Navigate to the **Models** tab and open the Oracle Fusion 10 HCM model

6. Click the **Reverse Engineer** tab and set the **Mask** property to `%.FLEX_BI_BaseWorkerAsgDFF_VI` as shown below. This prevents attempting to refresh the model for all the VOs inadvertently.



7. Set the **INTROSPECT_SOURCE** option to **false**, the **USE_LOG** option to **false** and enable the **REFRESH_SDS_FLEXFIELDS** mode by changing the option value to **true**.
8. Click **Reverse Engineer**to bring all VO's extension columns into the model.

> **Note:**
>
> If you have already loaded data, then you need to do a full load again. Reset the warehouse and make sure that all warehouse tables are empty and reload.

Option 3

If Option 1 and 2 are not possible, then use option 3. In this option you attempt to manually update the backend table that controls the mapping between the Source column and the target warehouse column. Identify a column that has already been mapped but not required and then run backend update statements to switch it to a column that should get mapped instead.

As an example, assume that CATEGORY10_ extension column is not required and you want to switch this mapping with INTERNATIONAL__STATUS_ extension column.

1. Connect to BIApps warehouse schema using SQL tools.
2. Run the following update script:

```
UPDATE W_ETL_FLEX_SQL SET FLEX_SRC_ATTRIB     ='INTERNATIONAL__STATUS_',
ATTRIB_SQL_EXPRESSION='ASGDFF.INTERNATIONAL__STATUS_'WHERE FLEX_CODE
='HRASG'  AND FLEX_SRC_TABLE
='HcmTopModelAnalyticsGlobalAM.BaseWorkerAsgDFFBIAM.FLEX_BI_BaseWorkerAsgDFF_VI'
AND FLEX_SRC_ATTRIB ='CATEGORY10_'
AND FLEX_ ATTRIB='ASSIGNMENT_ATTR14_CHAR'
AND DATASOURCE_NUM_ID   =200;

COMMIT;
```

> **Note:**
>
> If the data is already loaded then you need to reload it to use the new mapping. Do not attempt to truncate all warehouse tables before doing the reload. Instead use the reset warehouse option in the Configuration Manager. Truncating all warehouse tables will truncate the mapping table as well.

Setting Up Key Flex Fields for Financials Fusion Applications Source Data

If applicable, load the financial KFF data for GL#, CAT# and LOC# KFFs into Oracle Business Analytics Warehouse.

These instructions only apply if you are deploying a Fusion Applications cloud data source.

1. Enable and setup the VOs for extraction in Oracle BI Cloud Connector Console. See Using Oracle BI Cloud Connector Console to Configure Cloud Extract.
2. Configure the ODI repository in ODI. See Using ODI to Set Up Key Flex Fields.

Using Oracle BI Cloud Connector Console to Configure Cloud Extract

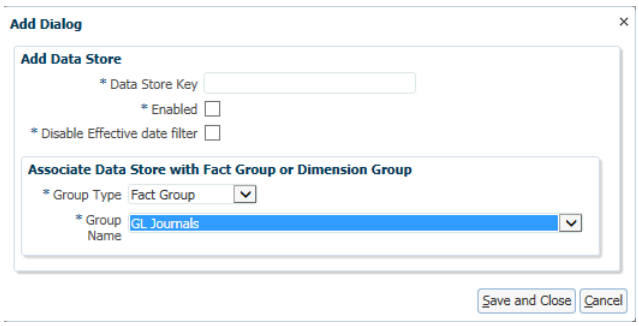
When you have completed the key flexfield (KFF) setup in Oracle Fusion Applications and deployed the flexfield, view objects (VO) are generated for each segment that you have enabled for Oracle Business Intelligence (BI). Each VO must be seeded and enabled for BI extraction so that it can be loaded into Oracle Business Analytics Warehouse.

To seed and enable VOs for extraction:

1. In Oracle BI Cloud Connector Console, navigate to **Configure Cloud Extract** link on the Tasks pane to display the Configure Cloud Extract dialog.
2. Scroll down to the Data Store area.
3. Click **Add** to display the Add Data Store dialog, specify the details, then click **Save** and **Close**.

> **Note:**
>
> VO names are case-sensitive.

You must add VOs under the **GL Journals** under the **Oracle Financial Analytics Offering**, as shown in the example screen shot.



4. To enable VOs for extraction, select the parent Offering, Functional Area, FG/DG, or individual VO .

5. Enable and add these VOs for extraction.

   - For the GL# KFF, you must add the BI Flattened VO along with the segment VOs generated for the segment labels mapped to BI Objects in your Fusion setup.

     The BI Flattened VO name for GL# that must be added is `FscmTopModelAM.AccountBIAM.FLEX_BI_Account_VI`.

   - The VOs generated for segment labels `FA_COST_CTR` (mapped to Dim – Cost Center), `GL_ACCOUNT` (mapped to Dim – Natural Account Segment), and `GL_BALANCING` (mapped to Dim – Balancing Segment) are known prior. You must add these VOs:

     ```
     FscmTopModelAM.AccountBIAM.FLEX_TREE_VS_FA_COST_CTR_VI
     FscmTopModelAM.AccountBIAM.FLEX_TREECODE_VS_FA_COST_CTR_VI
     FscmTopModelAM.AccountBIAM.FLEX_TREE_VS_GL_BALANCING_VI
     FscmTopModelAM.AccountBIAM.FLEX_TREECODE_VS_GL_BALANCING_VI
     FscmTopModelAM.AccountBIAM.FLEX_TREE_VS_GL_ACCOUNT_VI
     FscmTopModelAM.AccountBIAM.FLEX_TREECODE_VS_GL_ACCOUNT_VI
     ```

     > **Note:**
     >
     > For these VOs, ensure that you enable all the columns for the select list.
     >
     > When you add the TREECODE view objects, you must enable the **Disable Effective date filter** option. Additionally, ensure that `invunitsofmeasurep` view object is disabled for Human Capital Management. For Fusion Supply Chain Management and Customer Relationship Management, deploy the `INV_UOM_CLASSES` descriptive flexfield for`invunitsofmeasurep` view object.

   - The VOs generated for any segment label apart from `FA_COST_CTR`, `GL_BALANCING` and `GL_ACCOUNT` and mapped to the BI Object Dim – GL Segmentx are not known before hand as the VO names depends on the segment label. Therefore, you must add the VO names based on the naming pattern.

     If the segment is a tree segment (if you have created hierarchies for value sets used for those segments), then the VOs are named:

     `FscmTopModelAM.AccountBIAM.FLEX_TREE_VS_<segment label>_VI`

     `FscmTopModelAM.AccountBIAM.FLEX_TREECODE_VS_<segment label>_VI`

     If the segment is a non tree segment (if you have NOT created hierarchies for value sets used for those segments), then the VOs are named:

     `FscmTopModelAM.AccountBIAM.FLEX_VS_<segment label>_VI`

     For example:

Segment Label	Tree v/s Non Tree	VO Name
PRODUCT	Tree	FscmTopModelAM.AccountBIAM.FLEX_TREE_VS_PRODUCT_VI FscmTopModelAM.AccountBIAM.FLEX_TREECODE_VS_PRODUCT_VI

Segment Label	Tree v/s Non Tree	VO Name
ORG	Non Tree	FscmTopModelAM.AccountBIAM.FLEX_VS_ORG_VI

> **Note:**
>
> When you add TREECODE VOs, you must enable the **Disable Effective date filter** option.

For the CAT# and LOC# KFFs, you will need to add the BI Flattened VO for each KFF.

The BI Flattened VO name for CAT# that needs to be added is `FscmTopModelAM.CategoryBIAM.FLEX_BI_Category_VI`. The BI Flattened VO name for LOC# that needs to be added is `FscmTopModelAM.LocationBIAM.FLEX_BI_Location_VI`.

- For Units of Measure (UOM) extensions, add `FscmTopModelAM.InvUomPublicViewAM.InvUnitsOfMeasurePVO` view object.

Once you have added these VOs and completed the extraction process, the data files for these VOs will be downloaded into the physical location configured for replication stage files logical schema in ODI (Fusion 9: `DS_FUSION_9_0_REPLSTG_FILES`, Fusion 10: `DS_FUSION_10_0_REPLSTG_FILES`).

The files generated for GL# segment labels mapped to Dim – GL Segmentx (Dim – GL Segment 1-10) will have corresponding pre-seeded data stores using a generic naming convention in ODI. The next step is to rename the corresponding files with appropriate file names so that they can load the corresponding data stores.

The mapping between the files generated and the new file names corresponding to the data stores is based on the segment label to BI Object mapping and setup for that segment (tree v/s non tree).

Taking the same example as mentioned in the previous steps – PRODUCT label is mapped to Dim – GL Segment 1 and is a tree segment and ORG label is mapped to Dim – GL Segment2 and is a non tree segment, then the mapping between the generated files and the new files will be:

File Generated	New File Name
File_FscmTopModelAM.AccountBIAM.FLEX_TREE_VS_PRODUCT_VI	File_FscmTopModelAM.AccountBIAM.FLEX_TREE_VS_GL_SEGMENT1_VI
File_FscmTopModelAM.AccountBIAM.FLEX_TREECODE_VS_PRODUCT_VI	File_FscmTopModelAM.AccountBIAM.FLEX_TREECODE_VS_GL_SEGMENT1_VI
File_FscmTopModelAM.AccountBIAM.FLEX_VS_ORG_VI	File_FscmTopModelAM.AccountBIAM.FLEX_VS_GL_SEGMENT2_VI

This mapping has to be provided in a configuration file named `FinKFFFileRename.cfg` which will be used in the downstream processes to load the data from those files.

6. Create and save this configuration file in the same location where all the data files generated in this procedure are present.

This configuration file has to be placed in the replication staging location in the ODI environment (the location where the files are copied and placed from UCM to ODI).

The configuration file has to be created as a comma delimited file and the format of the entries in the file has to be as shown in this sample entry. Save the file when you are done making the entries.

<Generated File Name>,<New File Name based on the pre seeded data store>

A sample entry in the file would look like this:

```
file_fscmtopmodelam_accountbiam_flex_vs_gl_management_vi,file_fscmtopmodelam_acco
untbiam_flex_vs_gl_segment2_vi
```

Create the configuration file in the same platform (Windows or Linux) where you will be eventually saving this file. Avoid copy and paste from one platform to the other. This will avoid issues regarding special characters in text files when crossing different platforms.

Using ODI to Set Up Key Flex Fields

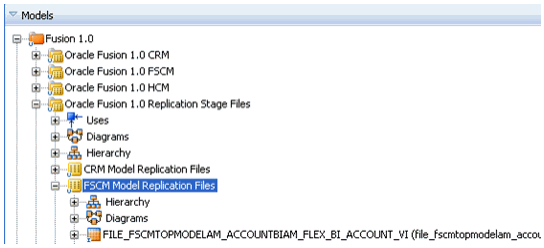
The BI (business intelligence) flattened VO (view object) generated for each key flexfield (KFF) has columns relating to each segment label. Use this procedure to set up the mappings for these columns.

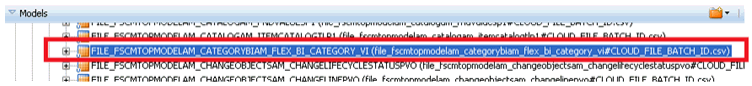
1. For CAT# KFF, check the csv file generated for the BI flattened VO for the list of additional columns for each segment - `file_fscmtopmodelam_categorybiam_flex_bi_category_vi%.csv`.

   These segment columns end with "_" or "_c". For example, BASED_CATEGORY_, MINOR_CATEGORY_.

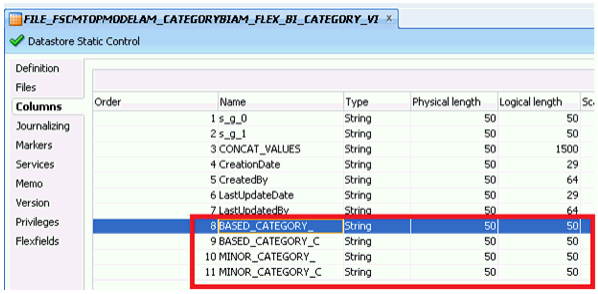
   You must add these new columns in the file data store and the VO data store in ODI.

   Navigate to the file data store to add the new columns.





2. Add the new columns to the `FILE_FSCMTOPMODELAM_CATEGORYBIAM_FLEX_BI_CATEGORY_VI` data store with the default data type of String (50,50) for all columns.

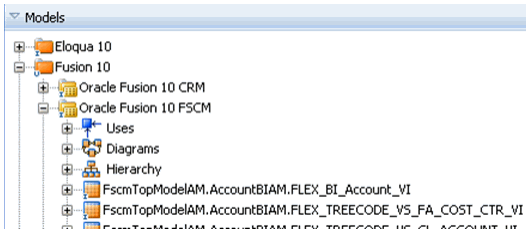


For LOC# KFF, check the csv file generated for the BI flattened VO for the list of additional columns for each segment - `file_fscmtopmodelam_locationbiam_flex_bi_location_vi%.csv`. These segment columns end with "_" or "_c". The corresponding file data stores for LOC# KFF is `FILE_FSCMTOPMODELAM_LOCATIONBIAM_FLEX_BI_LOCATION_VI`.

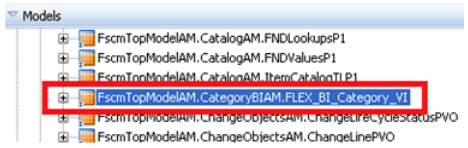
3. Repeat the configuration steps for the corresponding VO data stores in ODI.

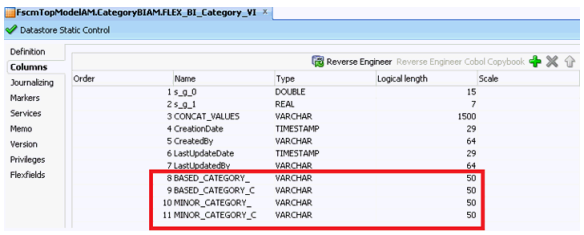
   The VO data stores are in the path shown in the image. Use the default data type of Varchar(50, 50).

   - CAT# KFF VO data store: FscmTopModelAM.CategoryBIAM.FLEX_BI_Category_VI
   - LOC# KFF VO data store: FscmTopModelAM.LocationBIAM.FLEX_BI_Location_VI



Scroll down to locate the VO data stores.



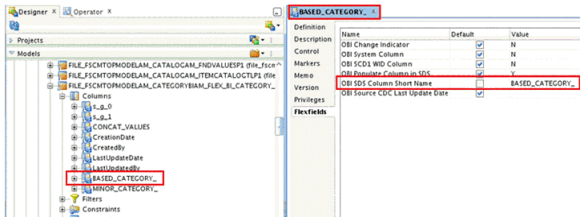


4. For the newly added columns in both the file data store and VO data store, set the flexfield value for **OBI SDS Column Short Name**.

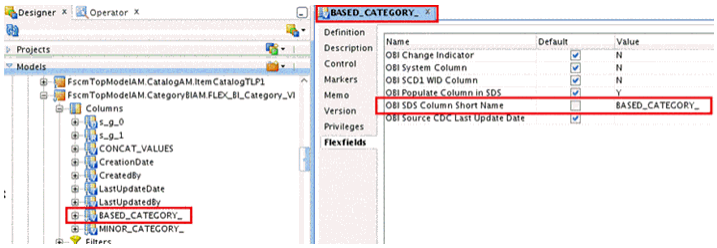
   Ensure that the flexfield value is the same as the column name. Also, ensure that you set the flexfield value **ODI Populate Column** to **Y** in SDS for these columns.

   These images display example flexfield values.

   For example, CAT# KFF File Data Store Column:

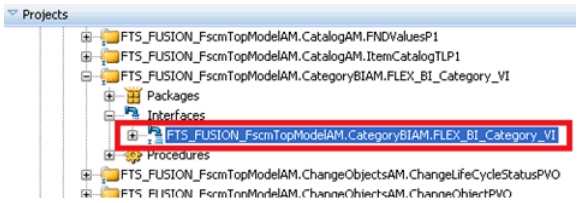


   For example, CAT# KFF VO Data Store Column:

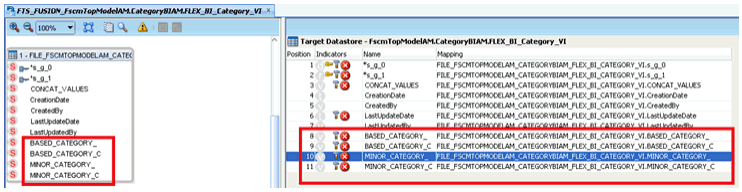


5. Repeat for LOC# KFF.
6. Execute `GENERATE_SDS_DDL in INCR_REFRESH_MODE`.

   This process updates the SDS table to include the new extended columns.
7. When you have added the columns in the appropriate data stores, map the columns in the corresponding ODI mappings to load the data.
8. For the CAT# KFF, edit the FTS mapping located under the SDE_FUSION_V1_ADAPTOR folder to map these new columns.



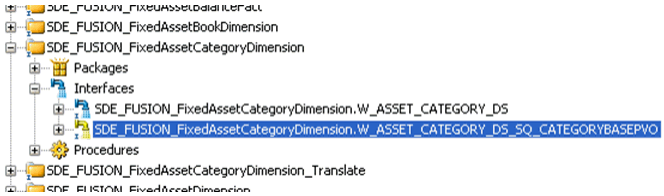
9. Create a one-to-one mapping between the segment columns in `FTS_FUSION_FscmTopModelAM.AccountBIAM.FLEX_BI_Account_VI`.



10. Save the changes, then regenerate the underlying scenario for the package.
11. Similarly, if you have LOC# KFF, edit the corresponding FTS mapping to map the new columns:

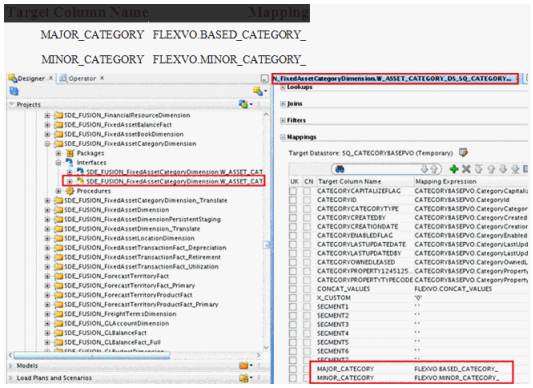
    LOC# KFF FTS mapping: `FTS_FUSION_FscmTopModelAM.LocationBIAM.FLEX_BI_Location_VI`.
12. Save the changes and regenerate the underlying scenarios for the packages.
13. Edit the SDE mapping for CAT# KFF to map these new columns to corresponding columns in the staging table.

    The SDE mapping is located in the same `SDE_FUSION_V1_Adaptor` folder.



The column mapping is based on the segment label to BI Object mapping done in your Fusion Applications configuration.

For CAT# KFF, if you have mapped BASED_CATEGORY and MINOR_CATEGORY then you can use them as the Major and Minor category.



14. Save the changes and regenerate the underlying scenario for the package.
15. If applicable, complete similar steps for LOC# KFF based on the columns that you extend for these:
    - SDE mapping: `SDE_FUSION_FixedAssetLocationDimension`
    - Staging table: `W_ASSET_LOCATION_DS`

Additional Steps for Fusion Financials Implementations

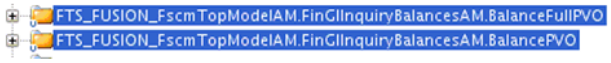
If you are deploying Fusion Financials on Oracle Cloud, then you must make the additional modifications to FTS Fusion mappings related to GL Balances. These steps are only applicable if you have an Oracle Fusion implementation on Oracle Cloud.

1. In ODI Studio, locate these two FTS Fusion mappings in the ODI Repository.

   `FTS_FUSION_FscmTopModelAM.FinGlInquiryBalancesAM.BalanceFullPVO`

   `FTS_FUSION_FscmTopModelAM.FinGlInquiryBalancesAM.BalancePVO`

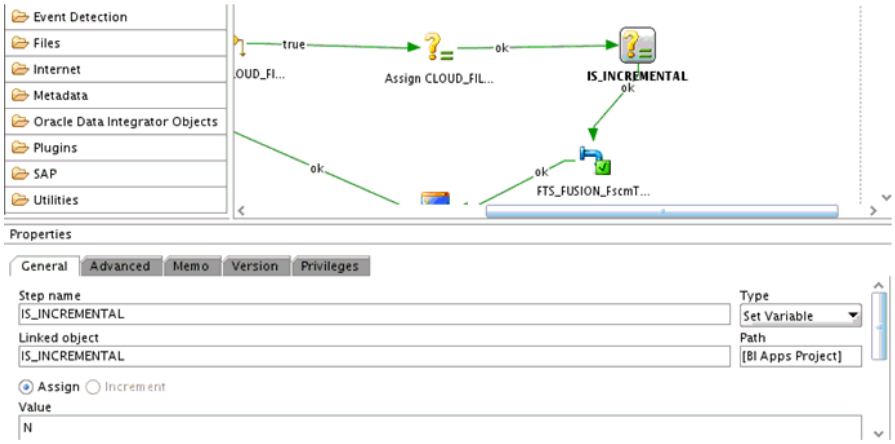
   The FTS mappings are located in the ODI repository under the folder Mappings - SDE_FUSION_10_ADAPTOR.



2. Edit the packages in the two folders.

   Before the change, the IS_INCREMENTAL variable should be displayed as in this example:

3. For each package, click on the IS_INCREMENTAL variable to display the Properties dialog, and change the **Type** value from **Refresh Variable** to **Set Variable**, and set the Value to **N**.



4. Save the changes to the packages and regenerate the scenario for both packages.

Setting Up Key Flex Fields for HCM Fusion Applications Source Data

If applicable, load the HCM KFF data mentioned in this topic into Oracle Business Analytics Warehouse.

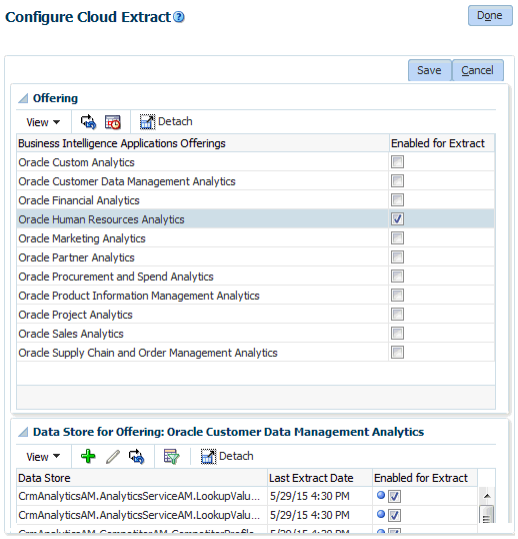
These instructions only apply if you are deploying a Fusion Applications cloud data.

When you have completed the KFF setup in Fusion and deployed the Flexfield, VOs are generated for each segment that you have enabled for BI. Each VO must be

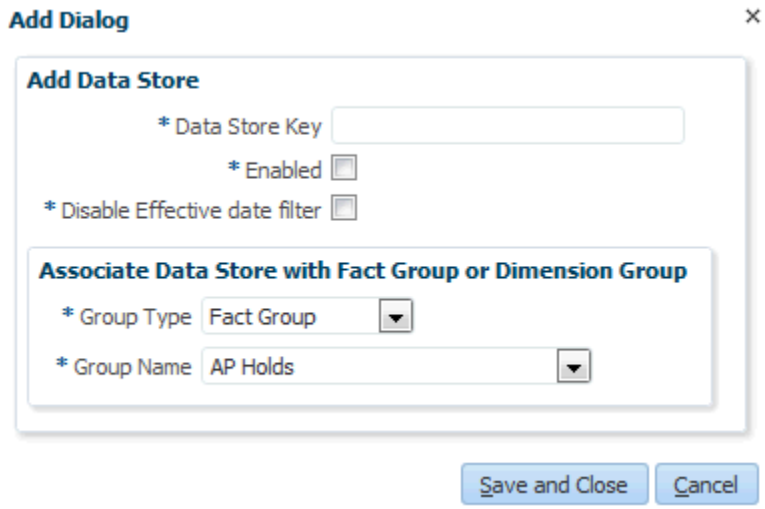
seeded and enabled for BI extraction so that it can be loaded into Oracle Business Analytics Warehouse.

To set up key flex fields for HCM Fusion applications source date:

1. Use Oracle BI Cloud Connector Console to load the View Objects (VOs) listed in Supported View Objects below:
   a. On the Fusion Applications pod, start Oracle BI Cloud Connector Console using a HTTP URL based on the following format: `http://<FA OHS Host:<FA OHS Port/biacm`
   b. In Oracle BI Cloud Connector Console, select the **Configure Cloud Extract** link on the Tasks pane to display the Configure Cloud Extract dialog.



   c. Scroll down to the Data Store area.
   d. For each of the View Objects (VOs) listed in the Supported View Objects table below, click the **Add** icon (+) to display the Add Data Store dialog and create a new data store.



> **Note:**
>
> `FscmTopModelAM.InvUomPublicViewAM.InvUnitsOfMeasurePVO` view object could fail if you have not deployed the `INV_UOM_CLASSES` flexfield. If you encounter a failure, then disable this view object for Human Capital Management using Oracle BI Cloud Connector Console.

The next scheduled Cloud Extract executed by Oracle BI Cloud Connector Console will extract these VOs and generate files as required by you. Then, the next scheduled load plan executed by Configuration Manager will download the newly generated FLEX files and load the flexfield changes into the Oracle Business Analytics Warehouse.

Supported View Objects

Presentation Table Name in Fusion Applications	Target Table	Model Name	VO Name
Assignment Extensible Attributes	`W_HR_ASSIGNMENT_DS/D`	Dim – HR Assignment	`HcmTopModelAnalyticsGlobalAM.BaseWorkerAsgDFFBIAM.FLEX_BI_BaseWorkerAsgDFF_VI`

Presentation Table Name in Fusion Applications	Target Table	Model Name	VO Name
Assignment History Extensible Attributes	W_HR_ASSIGN_ADDL_D	Dim – HR Assignment History	HcmTopModelAnalyticsGlobalAM.BaseWorkerAsgDFFBIAM.FLEX_BI_BaseWorkerAsgDFF_VI HcmTopModelAnalyticsGlobalAM.BaseWorkerAsgLegDDFBIAM.FLEX_BI_BaseWorkerAsgLegD DF_VI HcmTopModelAnalyticsGlobalAM.WorkRelationshipDFFBIAM.FLEX_BI_WorkRelationshipDFF_VI HcmTopModelAnalyticsGlobalAM.WorkRelationshipLegDDFBIAM.FLEX_BI_WorkRelationsh ipLegDDF_VI HcmTopModelAnalyticsGlobalAM.ContractDFFBIAM.FLEX_BI_ContractDFF_VI HcmTopModelAnalyticsGlobalAM.ContractLegDDFBIAM.FLEX_BI_ContractLegDDF_VI
Person Extensible Attributes	W_HR_PERSON_DS/D	Dim – HR Person	HcmTopModelAnalyticsGlobalAM.PersonsDFFBIAM.FLEX_BI_PersonsDFF_VI HcmTopModelAnalyticsGlobalAM.PersonDetailsDFFBIAM.FLEX_BI_PersonDetailsDFF_VI HcmTopModelAnalyticsGlobalAM.PersonTypeUsagesDFFBIAM.FLEX_BI_PersonTypeUsagesD FF_VI

Presentation Table Name in Fusion Applications	Target Table	Model Name	VO Name
Person Extensible Attributes	W_HR_PERSON_LEG_DS/D	Dim – HR Person Legislation	HcmTopModelAnalyticsGlobalAM.PersonLegislativeInfoDFFBIAM.FLEX_BI_PersonLegislativeInfoDFF_VI HcmTopModelAnalyticsGlobalAM.CitizenshipDFFBIAM.FLEX_BI_CitizenshipDFF_VI HcmTopModelAnalyticsGlobalAM.EthnicityDFFBIAM.FLEX_BI_EthnicityDFF_VI HcmTopModelAnalyticsGlobalAM.PersonLegDDFBIAM.FLEX_BI_PersonLegDDF_VI HcmTopModelAnalyticsGlobalAM.PersonNameDFFBIAM.FLEX_BI_PersonNameDFF_VI HcmTopModelAnalyticsGlobalAM.PersonNameLegDDFBIAM.FLEX_BI_PersonNameLegDDF_VI HcmTopModelAnalyticsGlobalAM.ReligionDFFBIAM.FLEX_BI_ReligionDFF_VI HcmTopModelAnalyticsGlobalAM.PersonVisaLegDDFBIAM.FLEX_BI_PersonVisaLegDDF_VI HcmTopModelAnalyticsGlobalAM.VisaPermitDFFBIAM.FLEX_BI_VisaPermitDFF_VI
Position Extensible Attributes	W_HR_POSITION_DS/D	Dim – HR Position	HcmTopModelAnalyticsGlobalAM.PositionCustomerFlexBIAM.FLEX_BI_PositionCustomerFlex_VI

Presentation Table Name in Fusion Applications	Target Table	Model Name	VO Name
Pay Grade Extensible Attributes	W_PAY_GRADE_DS/D	Dim – Pay Grade	HcmTopModelAnalyticsGlobalAM.GradeCustomerFlexBIAM.FLEX_BI_GradeCustomerFlex_VI
Job Extensible Attributes	W_JOB_DS/D	Dim – Job	HcmTopModelAnalyticsGlobalAM.JobCustomerFlexBIAM.FLEX_BI_JobCustomerFlex_VI
Location Extensible Attributes	W_BUSN_LOCATION_DS/D	Dim - Worker Location	HcmTopModelAnalyticsGlobalAM.LocationCustomerFlexBIAM.FLEX_BI_LocationCustomerFlex_VI
Department Extensible Attributes	W_INT_ORG_DS/D	Dim - Department	
Payroll Extensible Attribute	W_PAY_PAYROLL_D	Dim - Payroll Details	HcmTopModelAnalyticsGlobalAM.AllPayrollsDDFBIAM.FLEX_BI_AllPayrollsDDF_VI
Candidate Extensible Attributes	W_SCCN_CANDIDATE_D	Dim - Succession Candidate	HcmTopModelAnalyticsGlobalAM.PlanCandidateDFFBIAM.FLEX_BI_PlanCandidateDFF_VI
Workforce Event Type Extensible Attributes	W_WRKFC_EVENT_TYPE_D W_WRKFC_EVNT_ADDL_D W_WRKFC_EVNTRSN_ADDL_D	Dim - HR Workplace Event Type	HcmTopModelAnalyticsGlobalAM.ActionReasonsDFFBIAM.FLEX_BI_ActionReasonsDFF_VI HcmTopModelAnalyticsGlobalAM.ActionsDFFBIAM.FLEX_BI_ActionsDFF_VI HcmTopModelAnalyticsGlobalAM.ActionsLegDDFBIAM.FLEX_BI_ActionsLegDDF_VI
Project Attribute Extension	PROJECT_ADDL_D	Dim - Project	FscmTopModelAM.PJF_PROJECTS_ALLBIAM.FLEX_BI_PJF_PROJECTS_ALL_VI
Task Attribute Extension	TASK_ADDL_D	Dim - Task	FscmTopModelAM.TaskDffBIAM.FLEX_BI_TaskDff_VI

Presentation Table Name in Fusion Applications	Target Table	Model Name	VO Name
N/A	Employee_ADDL_D	Dim - Employee	
N/A	W_UOM_CONVERSION_G	N/A	

6

Setting Up Oracle Service Cloud Data Source

Follow these procedures to deploy Oracle Business Intelligence Applications (Oracle BI Applications) with Oracle Service Cloud source system.

Topics

Configuring Oracle Service Cloud Source System

Use these instructions to configure the Oracle Service Cloud source system.

To enable the Oracle Service Cloud source system, you must complete the following two tasks on the Oracle Service Cloud site:

1. Create an account with appropriate permissions on the Oracle Service Cloud site.

   You need the user name and password configured for this account when registering the Oracle Service Cloud source in Oracle BI Applications Configuration Manager. This authenticates and enables you to access data on the Oracle Service Cloud site.

   See Creating an Account on the Oracle Service Cloud Site

2. Review the SEC_PAPI_INTEG_HOSTS_SOAP configuration on the Oracle Service Cloud site.

   If it is not blank, then you must update it to include the direct IP address(s), range of addresses, or domain of the server(s) of the OBIA instance.

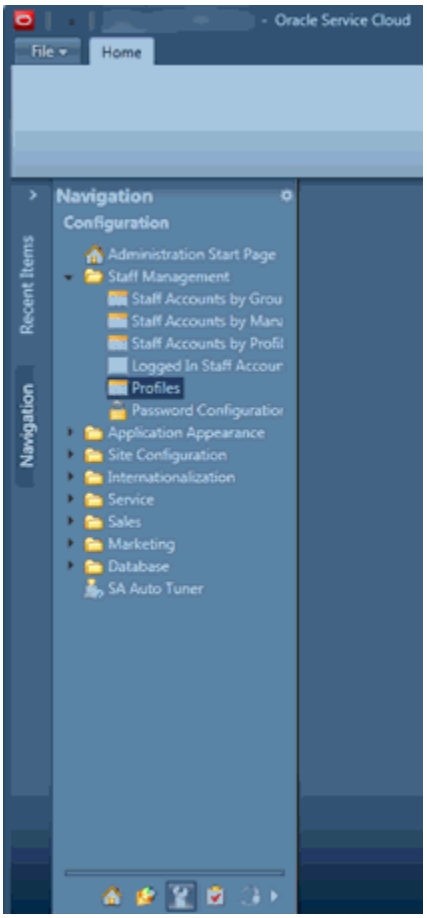
   See Reviewing SEC_PAPI_INTEG_HOSTS_SOAP Configuration

Creating an Account on the Oracle Service Cloud Site

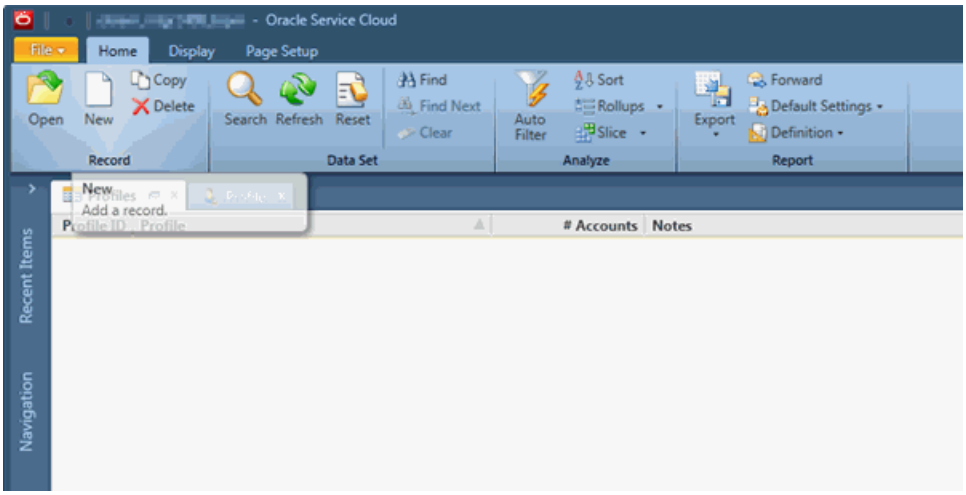
Use these instructions to create an account with appropriate permissions on the Oracle Service Cloud site.

To create an account on the Oracle Service Cloud site:

1. Log into the Oracle Service Cloud site using the URL that you used to install the Oracle Service Cloud client.
2. Create a new profile.
   a. Open the Profile editor (Click **Navigation set**, click **Configuration (Wrench)**, click **Staff Management** and then select **Profiles**).

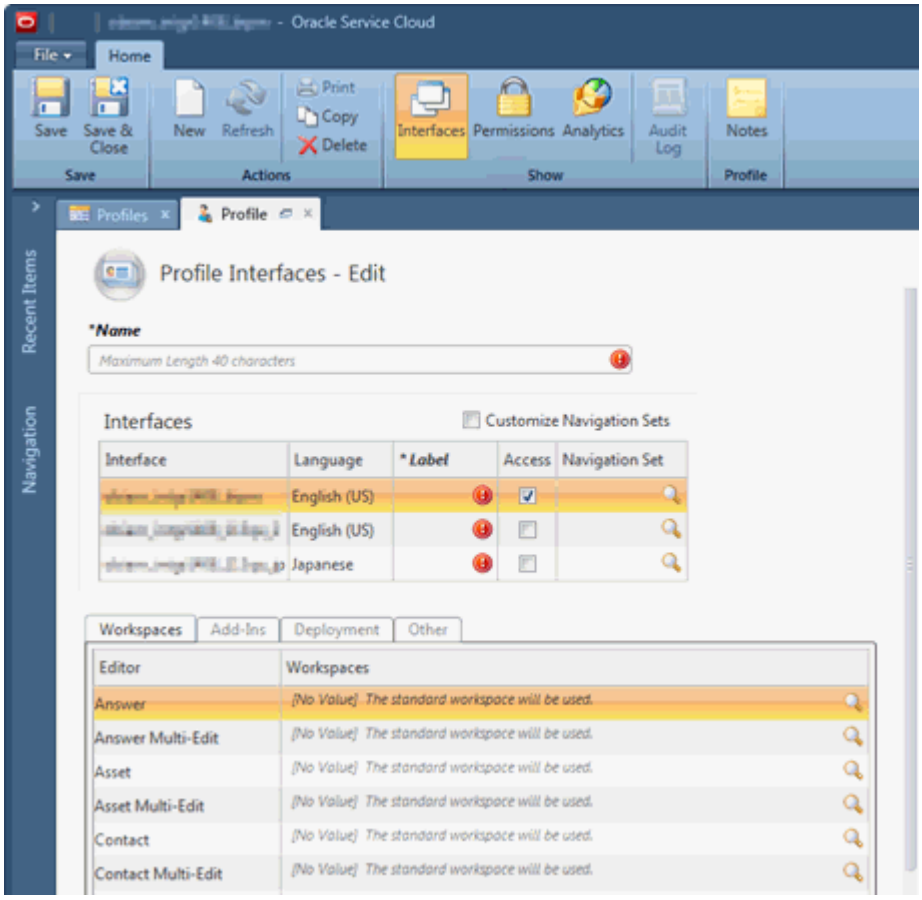


   b. Add a new profile (or use an existing profile).



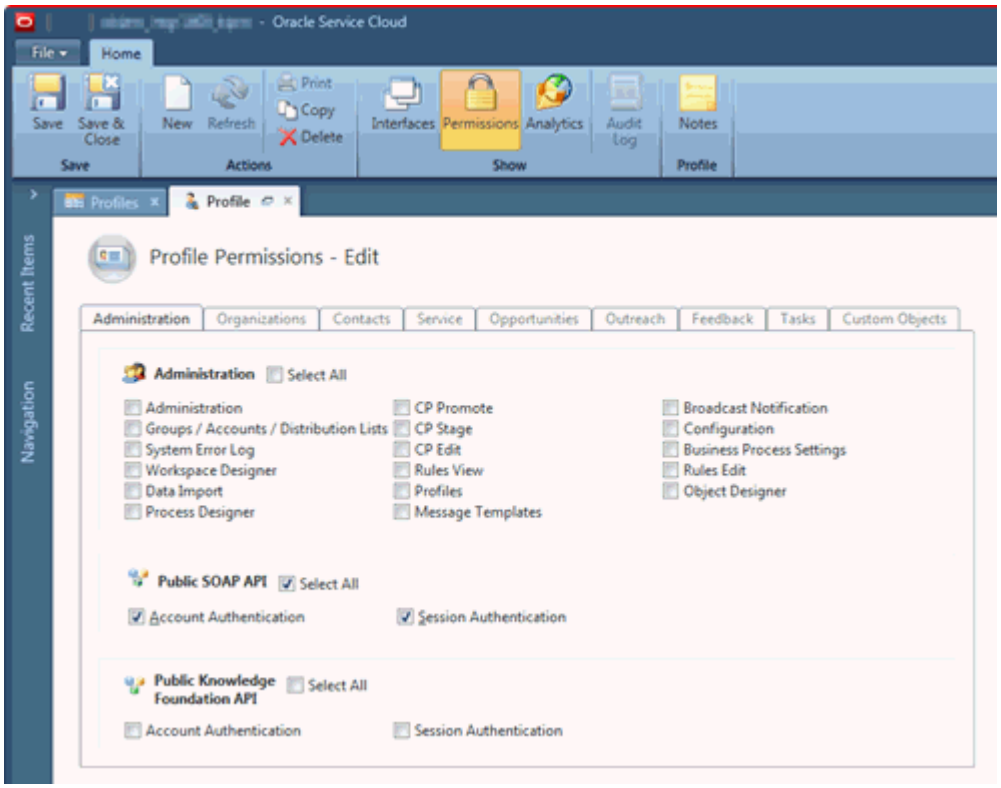
c. Provide required details for a new profile.

d. Click Interfaces menu option.



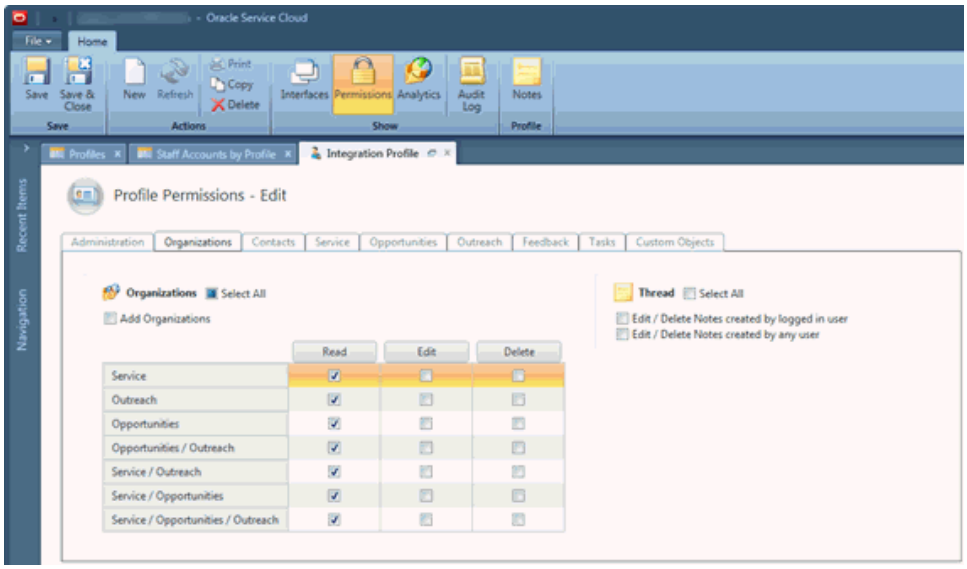
e. Provide name and label for each interface.

f. Click Permissions menu option.

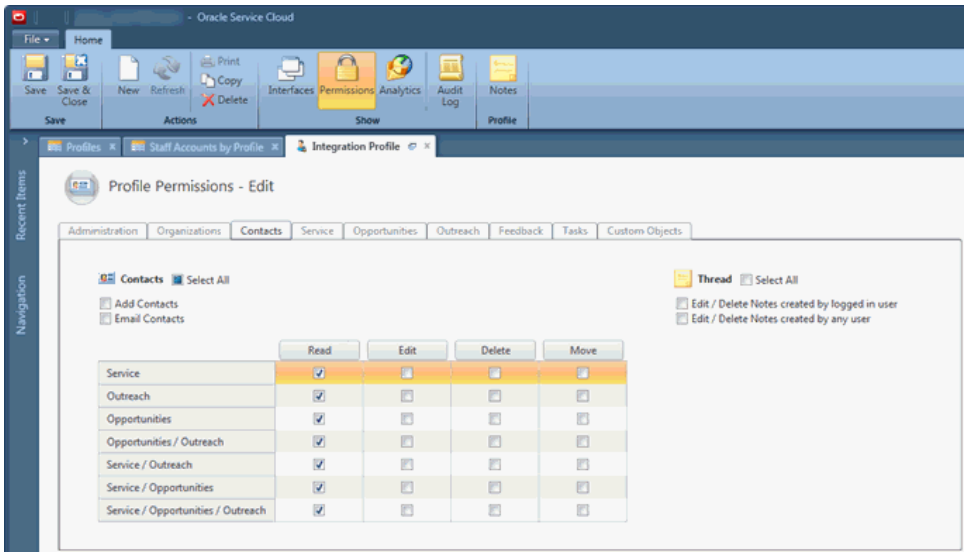


g. On the Administration tab, select the Select All check box in the Public SOAP API section.

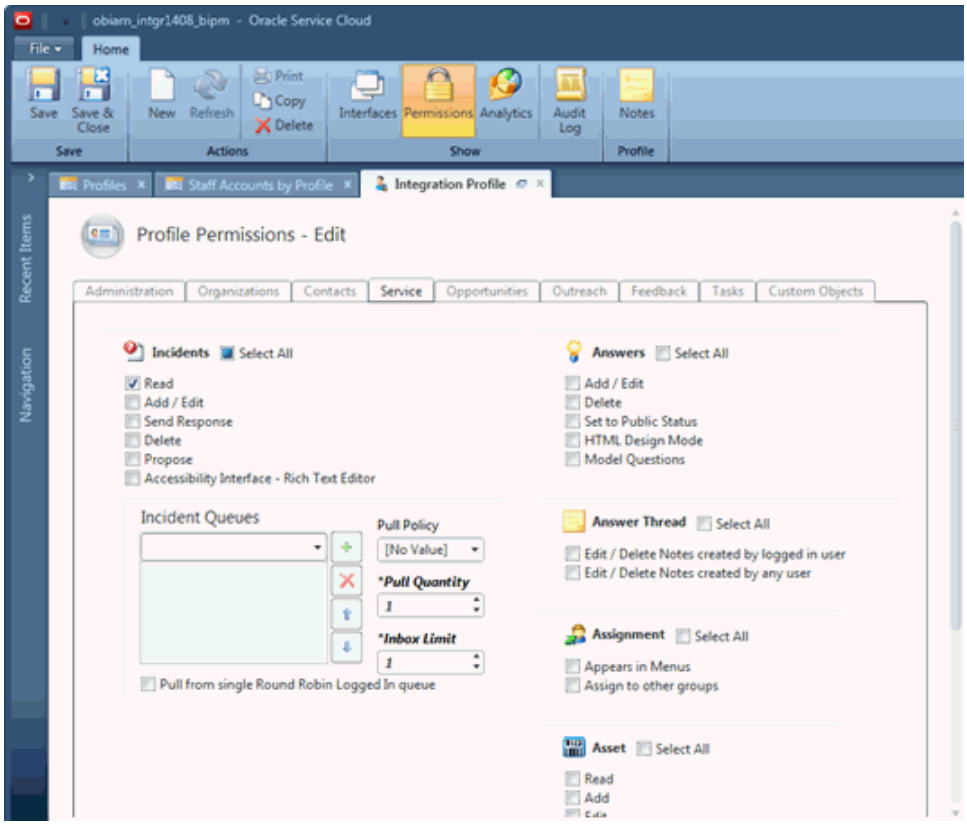
h. Navigate to the Organizations tab in the profile and select the Read button to select all Read check boxes.



i. Navigate to the Contacts tab in the profile and select the Read button to select all Read check boxes.



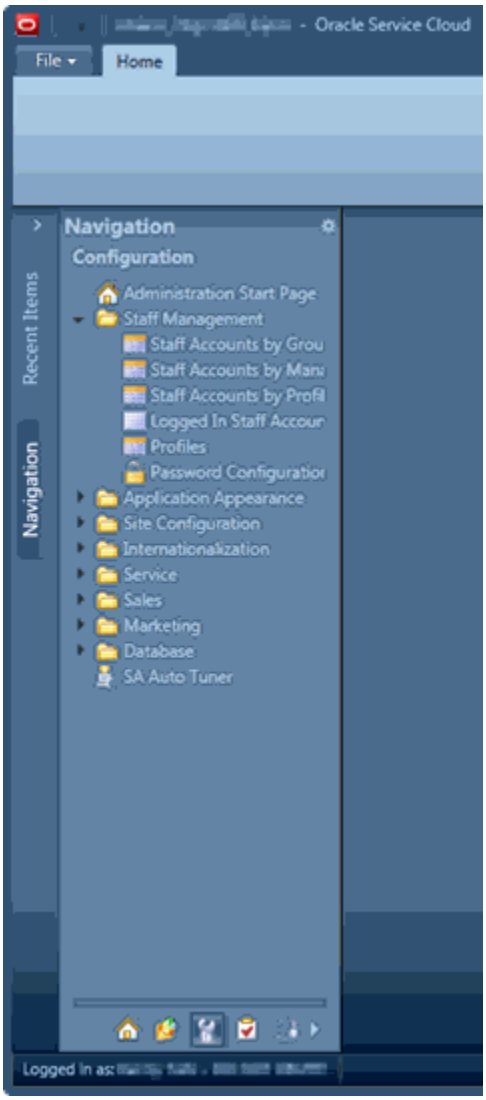
j. Navigate to the Service tab in the profile and select the Read check box in the Incidents area.



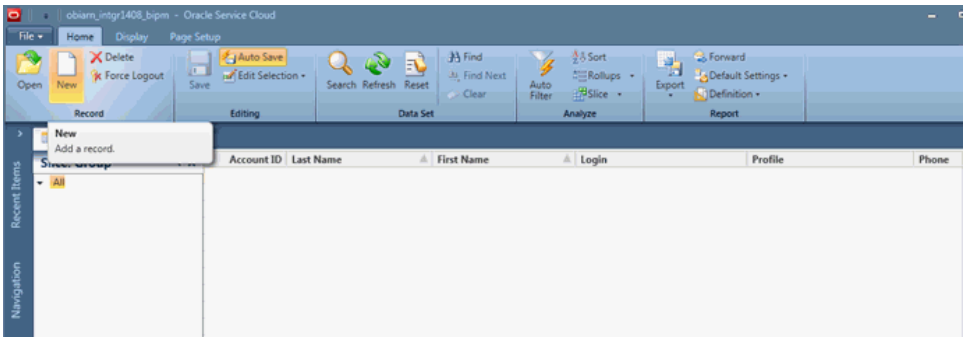
k. Save and close the profile.

3. Create a Staff Account using the above profile.

a. Open the Staff Accounts By Group section. (Click **Navigation set**, click **Configuration (Wrench)** , click **Staff Management** and then select **Staff Accounts by Group**).



b. Select New to add a new account.



c. Provide required details (remember the User Name you provide here).

> **Note:**
>
> The user name should be something like `BIAPPS_INTEG_USER_XXXXXXX` where `XXXXXXX` is a random alpha-numeric string to ensure that integration users configured for an adapter on different sites are unique and the risk of two sites having the same user name is minimized.

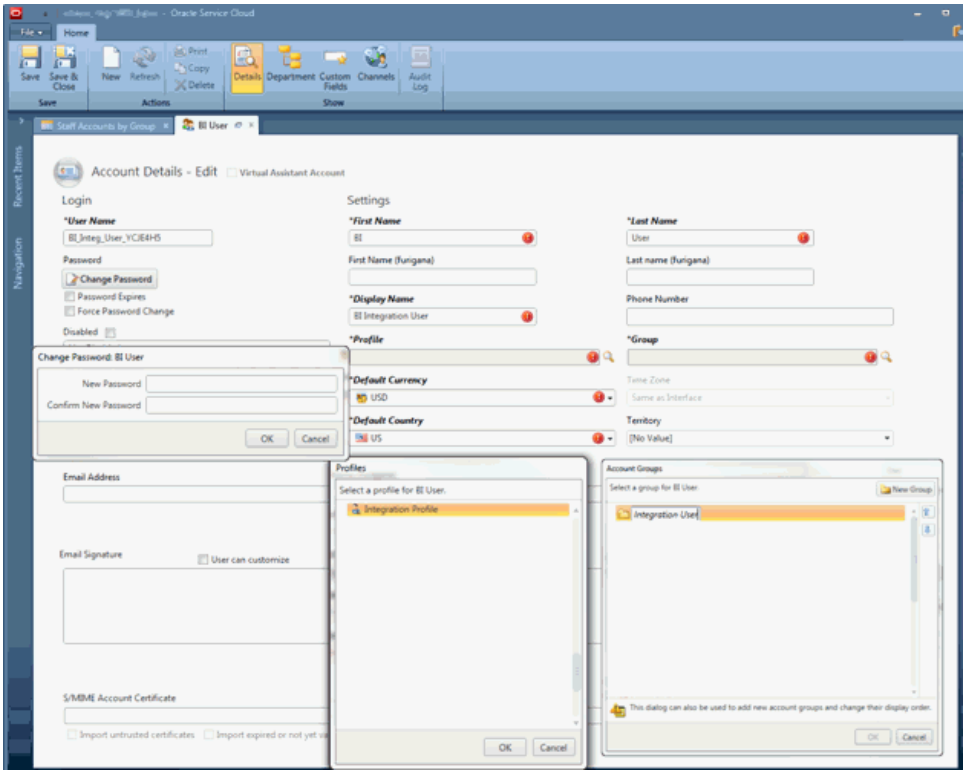
d. In the Profile field, select the Profile created in step 2 above.

e. In the Group field, either select an existing group or create a new one.

f. Click the change password button and set a password according to the password rules setup on the site. Remember this password. The user name from earlier step and this password will be needed when registering the Oracle Service Cloud source in Configuration Manager.

g. Deselect the Password Expires check box.

h. Save and close the account.



At this point, the proper account with appropriate permissions has been created on the site. You will need the user name and password that you configured for the user above while registering the Oracle Service Cloud source in Configuration Manager.

Reviewing SEC_PAPI_INTEG_HOSTS_SOAP Configuration

You must review the `SEC_PAPI_INTEG_HOSTS_SOAP` configuration option on the Oracle Service Cloud site.

The `SEC_PAPI_INTEG_HOSTS_SOAP` configuration defines which hosts are allowed to access the SOAP interface/APIs. Valid entries include a comma-separated list of domain names with wildcards, specific IP addresses, or IP subnet masks (for example, `*.oracle.com,1.2.3.4, 10.11.12.0/255.255.255.0`). Only users logging in from hosts matching entries in this list are allowed access to the SOAP interface/APIs. Default value for this configuration is blank.

If this value is blank (default), then the access is not IP restricted. From a security perspective, it is a best practice to have the IP addresses, ranges, or domains that known API calls should originate from. This limits API calls to come only from known/ finite addresses, ranges, or domains thus protecting access to a customer's data within their Oracle Service Cloud site. However, the value of this configuration is dependent on the customer's business processes.

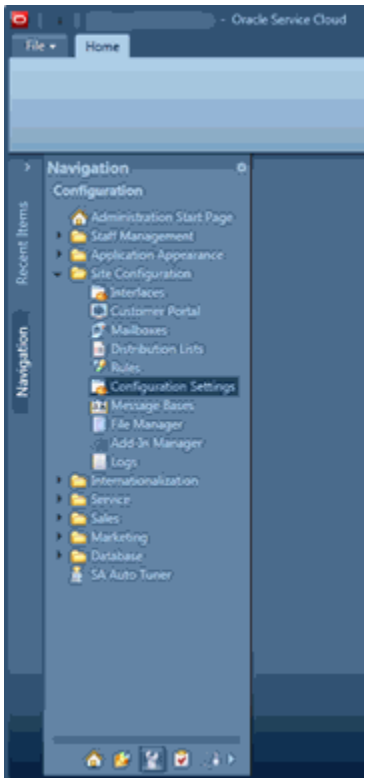
Use the Oracle Service Cloud Config Editor to look up the value for this configuration. If the configuration is blank, then no further action is necessary for this configuration. If and only if there is one or more value(s) in this configuration (it is not blank), then you must add either the direct IP address(s), range of addresses, or domain of the server(s) for the OBIA instance at the end of the existing values.

Valid entries to these settings include domain names with wildcards (`*.mycompany.com`), or specific IP addresses (`216.136.229.72`), or IP subnet masks (`216.136.229.0/255.255.255.0`). You cannot use wildcards with IP addresses or just domain names. When specifying a subnet mask or range of hosts, the `/255.255.255.0` component indicates that you mean to allow all possible values for the entire `216.136.229.x` range of addresses. You cannot use wildcards (`*`) to specify a range of IP addresses, such as `1.2.3.*` or `1.2.3*`. It is also possible to specify a comma separated list of the above values, such as `216.136.229.72, 216.136.229.0/255.255.255.0`. Instead of or in addition to an IP address range, you can enter a domain and should include it at the end of the list of IP addresses, such as `216.136.229.72, 216.136.229.0/255.255.255.0, *.domain.com`.

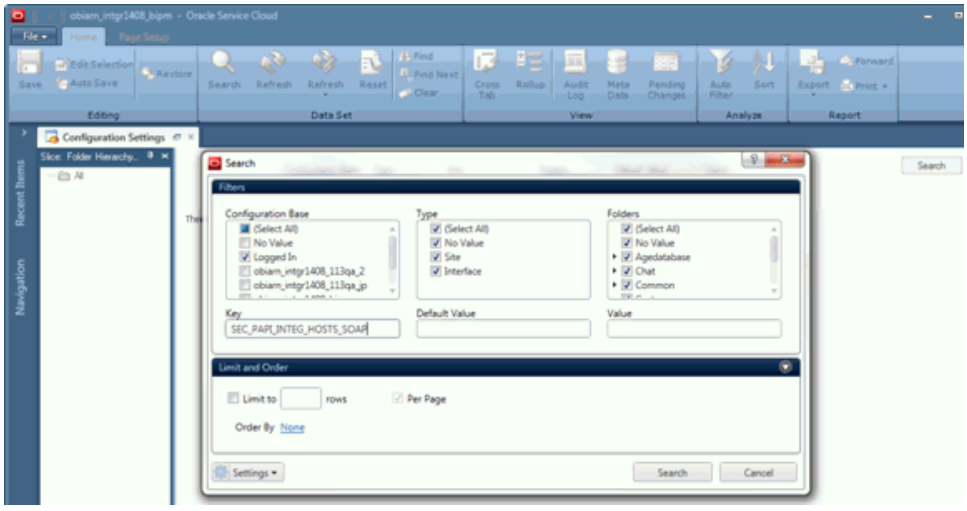
> **Note:**
>
> When using a domain name, a network operation must execute a `DNS` reverse lookup. This will result in connection delays and may induce a noticeable performance degradation of the Oracle Service Cloud application. Whenever possible, please refrain from using a domain name.

To lookup the value of the configuration:

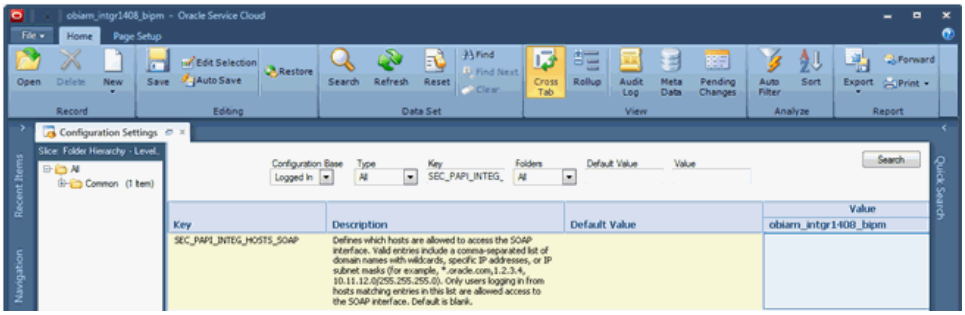
1. Open the Configuration Settings Editor in the Oracle Service Cloud site (Click **Navigation set**, click **Configuration (Wrench)**, click **Site Configuration** and then select **Configuration Settings**).



2. Enter `SEC_PAPI_INTEG_HOSTS_SOAP` in the Key field in the Search window that pops up.
3. Select Search.



4. Look at the value in the right column of data returned. The following screen shot is the configuration with the default blank value.



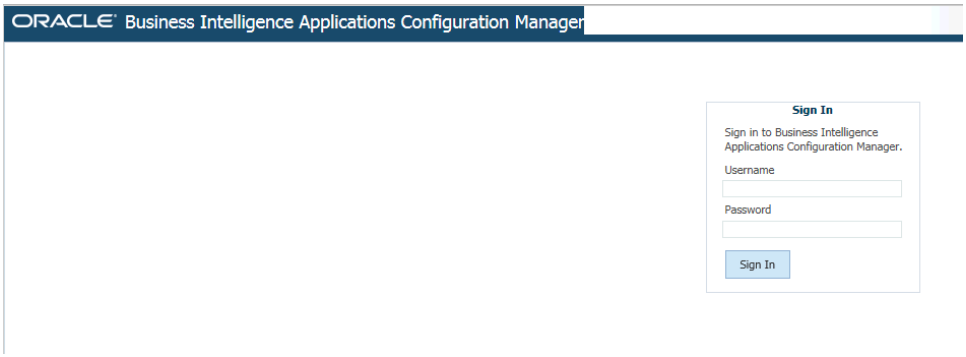
5. If a value exists in the Value column, then you must add either the IP addresses/ranges/domains for the OBIA instance at the end of the string of existing entries using a comma as a delimiter.
6. Select Save menu option to update the configuration.

Registering Oracle Service Cloud Source System

Specify the Oracle Service Cloud source details during initial configuration.

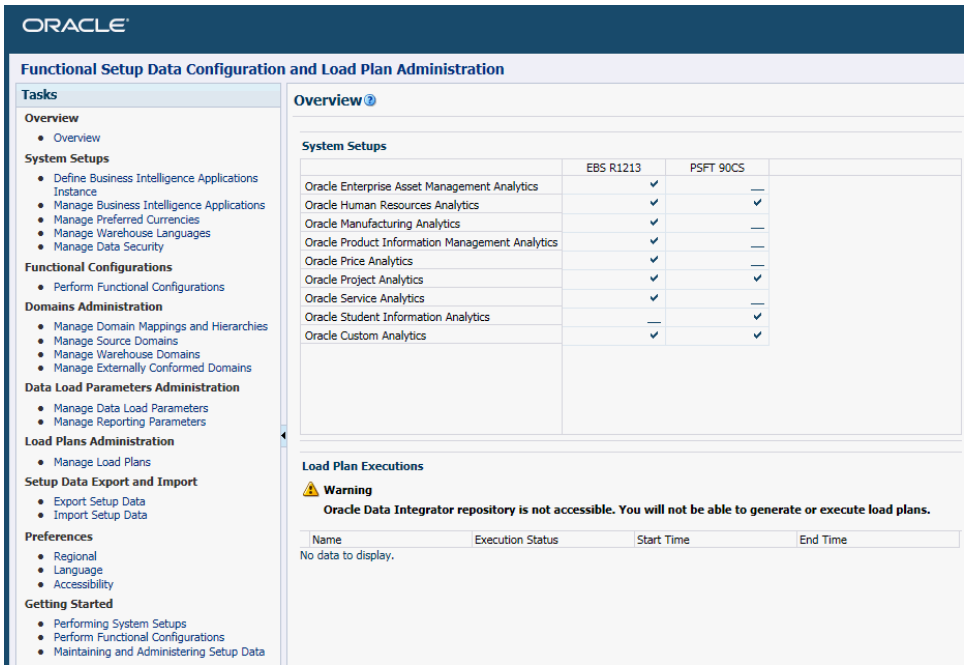
To register Oracle Service Cloud source system:

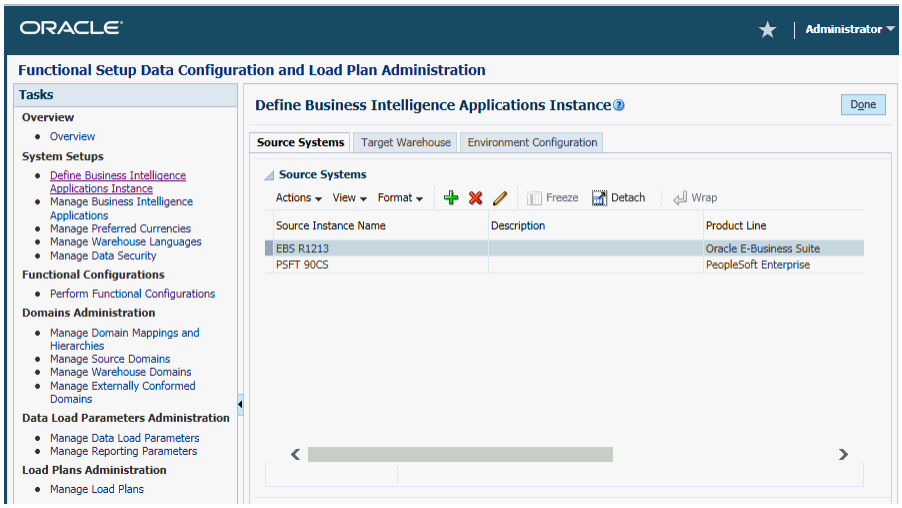
1. Log into Configuration Manager using the user name and password that you provided while creating an account on the Oracle Service Cloud site.



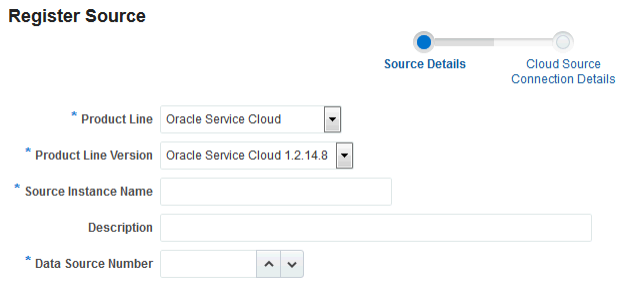
See Creating an Account on the Oracle Service Cloud Site

2. In the **Tasks** pane under **System Setups**, select the **Define Business Intelligence Applications Instance** link to display the **Source Systems** tab.





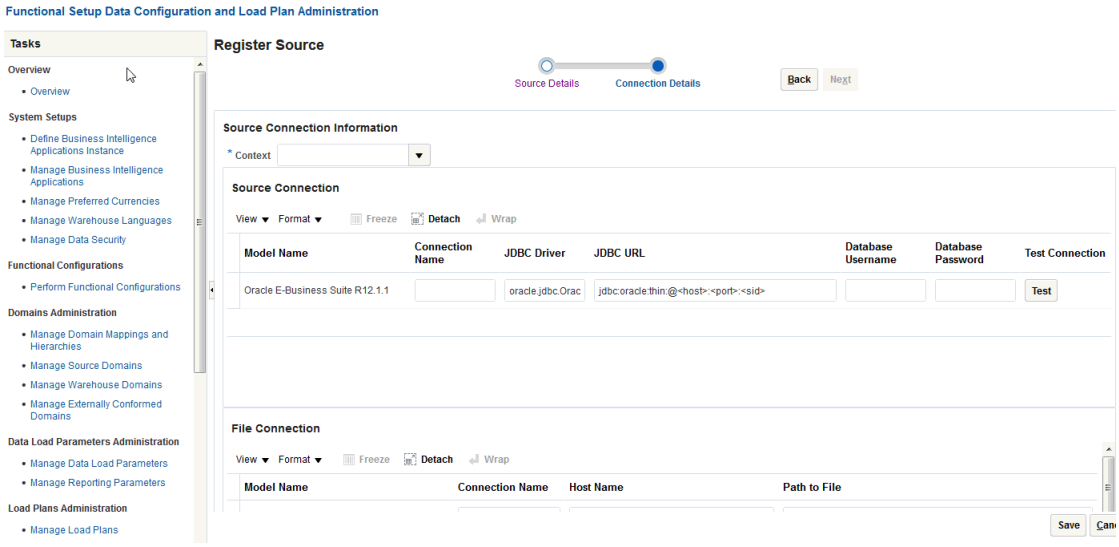
3. Click the **Add** icon (**+**) to display the Register Source dialog.



4. At the Register Source Details dialog, specify the following details:
   - Product Line — Select Oracle Service Cloud
   - Product Line Version — Select the Cloud data source version that is deployed.

- Source Instance Name — Specify a short readable name to identify this data source in Configuration Manager. For example, Service Cloud.
- Description — (Optional) Enter a short description to help Administrators and Implementers identify and use this data source in Configuration Manager.
- Data Source Number — Enter an integer or use the spinner to specify a number to identify data in the Oracle Business Analytics Warehouse. This number must be unique within Configuration Manager. The number 999 is reserved, and should not be used.

5. Click **Next** to display the Connection Details dialog



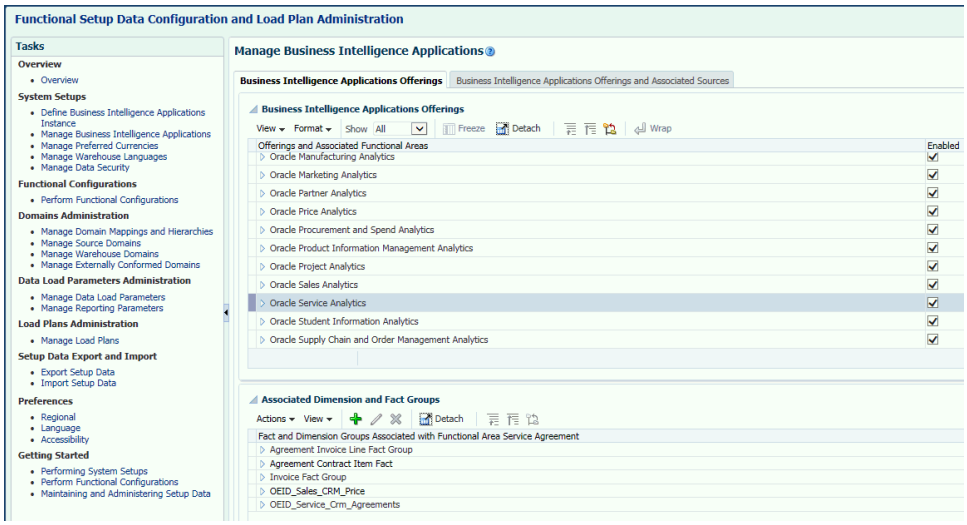
6. Enter the instance information from where the details have to be replicated:
   a. SDS Data source is populated automatically and you cannot modify it.
   b. Download folder and Prune days are populated automatically.
   c. Enter the host name and interface name available in the Oracle Service Cloud site URL that you use to extract data from the Oracle Service Cloud site. This URL has the host name, interface name, and static data, for example `https://obiarn-intgr1408-113qa.pr.rightnow.com/cgi-bin/obiarn_intgr1408_113qa.cfg/php/admin/launch.php`. In this url, `obiarn-intgr1408-113qa.pr.rightnow.com` is the host name and `obiarn_intgr1408_113qa` is the interface name.
   d. Enter the user name and password that you provided while creating an account in the Oracle Service Cloud site.
   e. Save. Configuration Manager creates the Oracle BI Applications instance.

Enabling Offerings for Oracle Service Cloud Source System

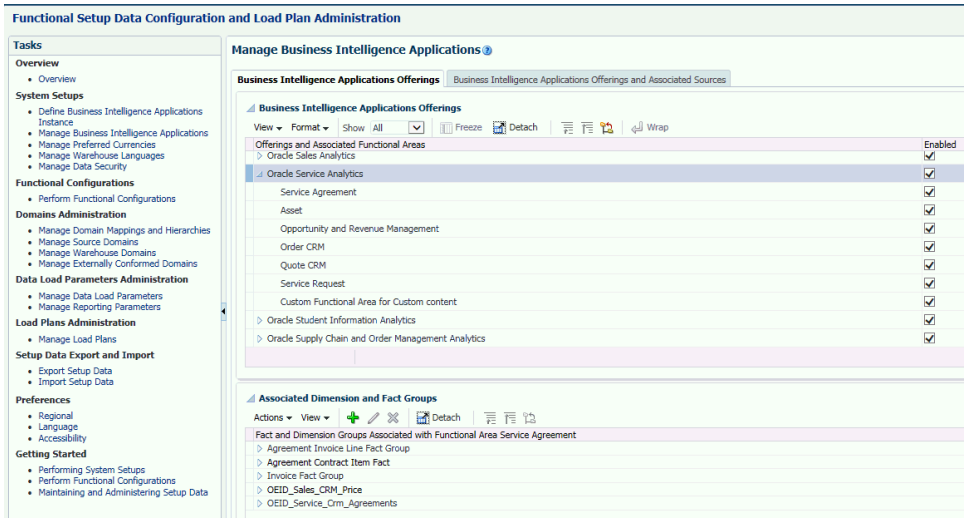
Follow these instructions to enable the Oracle Service Analytics offerings for deployment.

To enable offerings for Oracle Service Cloud source system:

1. In Configuration Manager, select the **Manage Business Intelligence Applications** link in the System Setups area on the Tasks pane.



2. Select the Enabled check box for the Service Analytics offering.



Once you select the parent offering, Configuration Manager selects the functional areas within the parent and the related offerings. See Enabling Offerings for Deployment

> **Note:**
>
> Ensure that the default selected offerings remain selected.

3. Click **Save**, then Done.

Specifying Offerings to Load for Oracle Service Cloud Source System

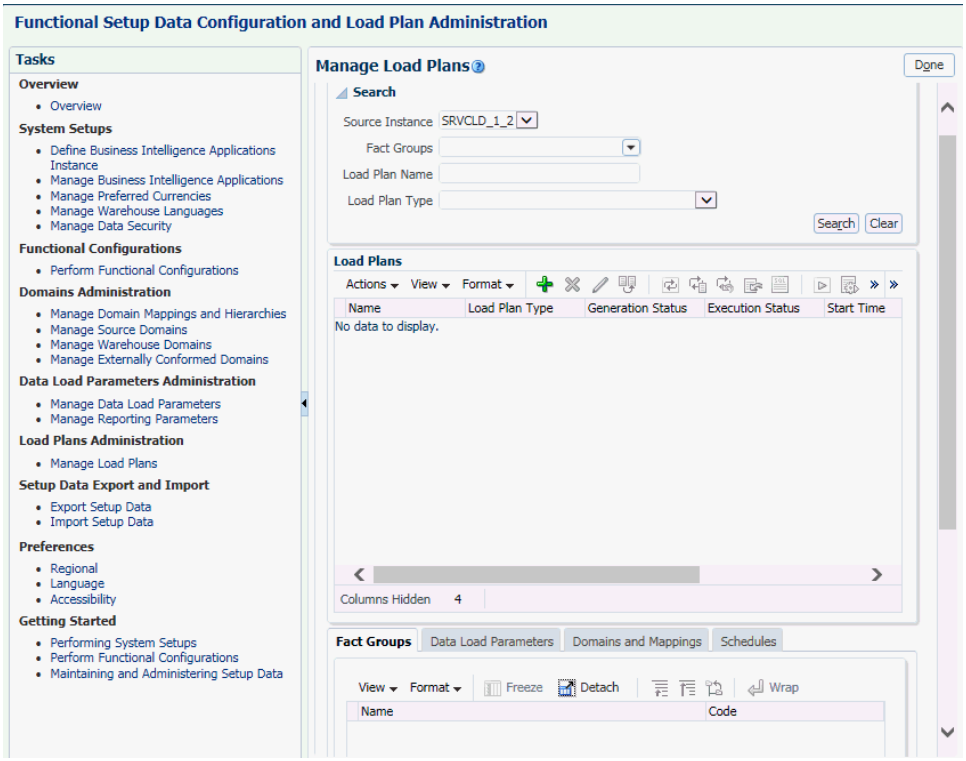
You specify which offerings and functional areas to load by creating a load plan.

A load plan is a set of instructions in Configuration Manager that extracts data from a Cloud data source and loads that data into the Oracle Business Analytics Warehouse. Load plans can be executed once only or scheduled to execute regularly.

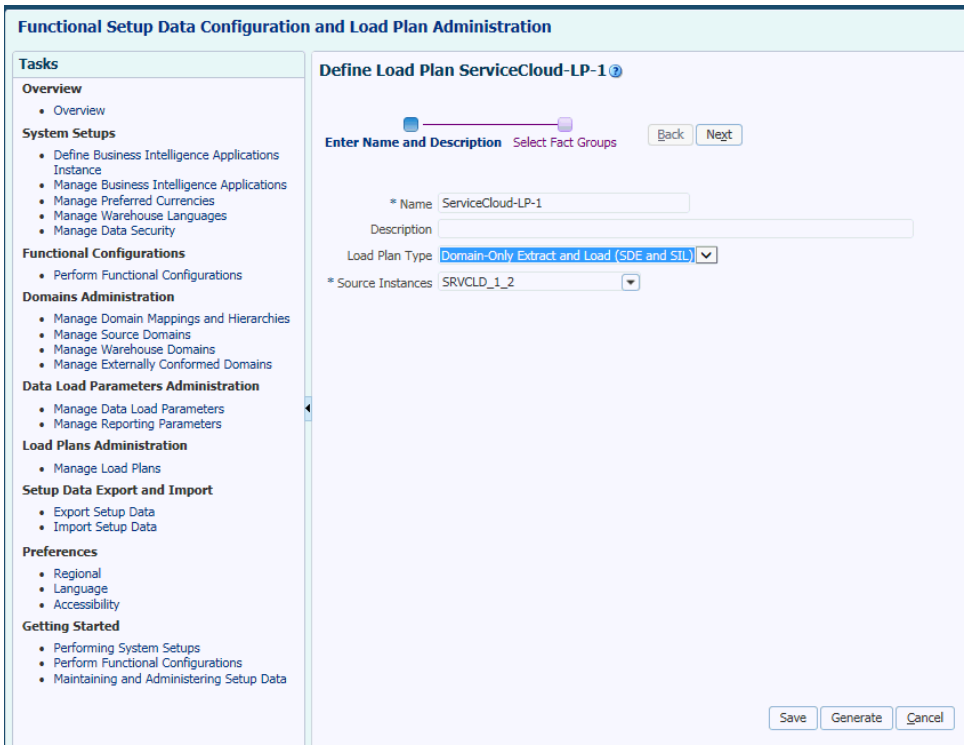
You need to create domain and main load plans.

To specify offerings to load for Oracle Service Cloud source system:

1. In Configuration Manager, select the **Manage Load Plans** link on the Tasks pane.

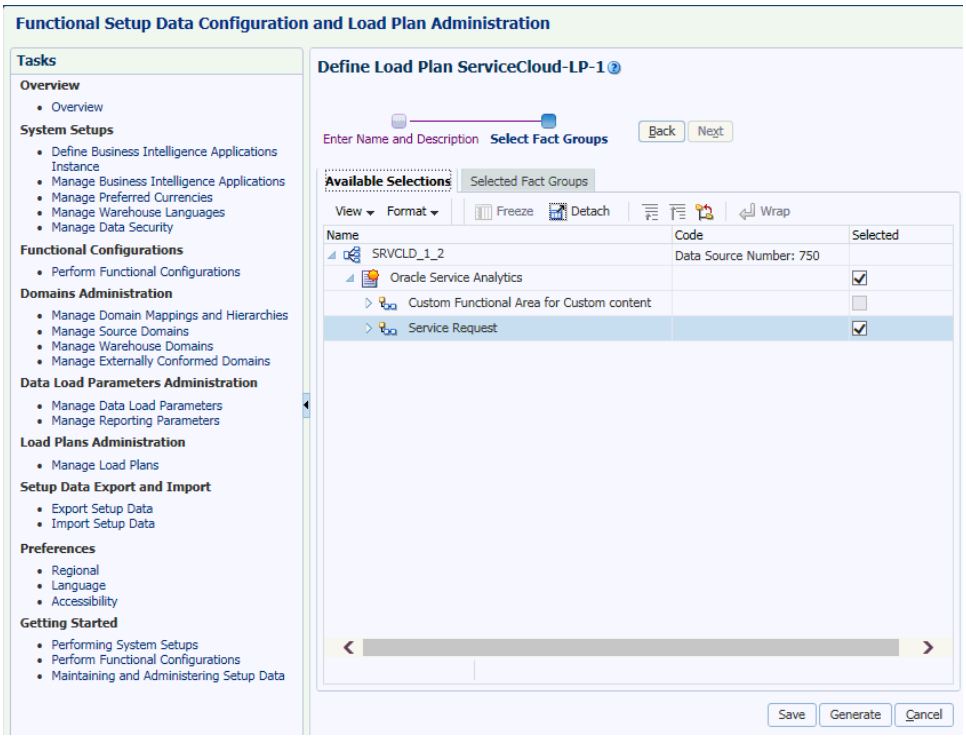


2. On the Load Plans toolbar, click the **Add** (+) icon to display the Define Load Plan dialog.
3. On the first page of the Define Load Plan series, specify the following information about the load plan:



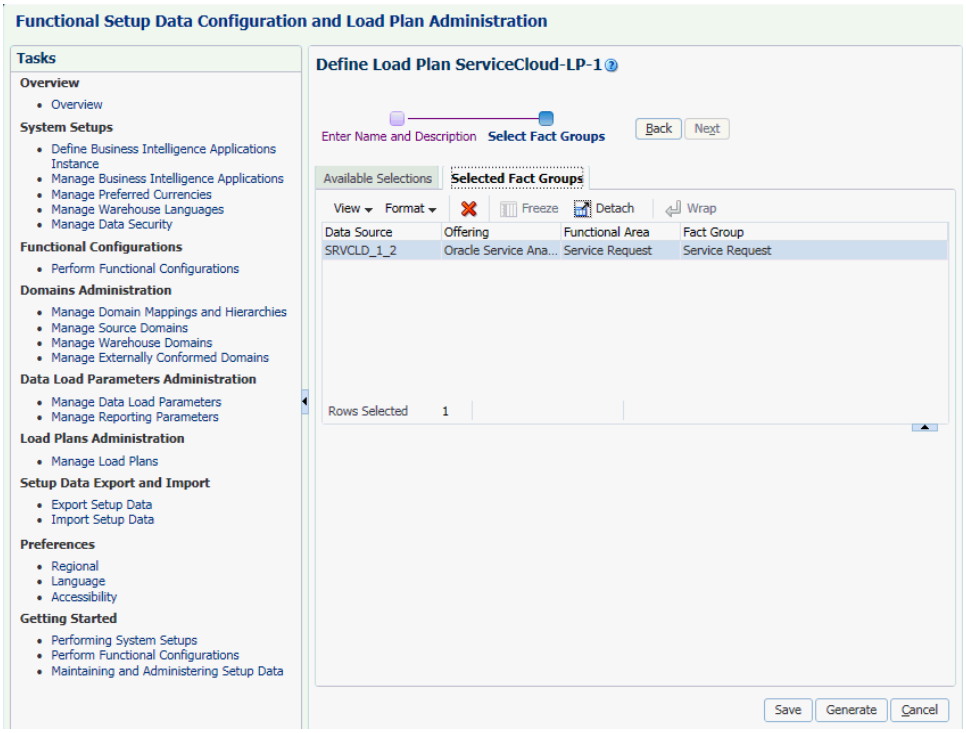
- Name — Enter a unique name for the load plan to identify the data being loaded.
- Description — (Optional) Enter additional information to help manage the load plan
- Load Plan Type — Select Domain - Only Extract and Load (SDE and SIL).
- Source Instances — Select Oracle Service Cloud, the data source from which the fact groups will be selected. This list displays the data sources that you specified during the task Register Oracle Service Cloud Source System in the Initial Configuration stage.

4. Click **Next** to display the Select Fact Groups page.
5. In the **Available Selections** tab, select the **Selected** check box next to Oracle Service Analytics and next to Service Request, to include this offering in the load plan.



> **Note:**
>
> You can remove fact groups from the Selected Fact Groups tab, if they have been selected by default when you select the parent offering. Else, you can select only the required fact groups to include them in the load plan.

6. To verify that you have the correct Fact Groups included in the load plan, click the Selected Fact Groups tab and verify the list.



7. Click **Save**, then click **Generate**.

   When the load plan generation is complete, you can execute the load plan manually or schedule the load plan to execute at a particular time. If the generation fails, then use the Help system in Configuration Manager to find out how to diagnose generation issues and make corrections.

   Similarly, create the main load plan, generate, and execute it. For the main load plan, ensure that you select the Source Extract and Load (SDE, SIL and PLP) load plan type and Oracle Service Analytics and Service Request as the fact groups to include it in the load plan.

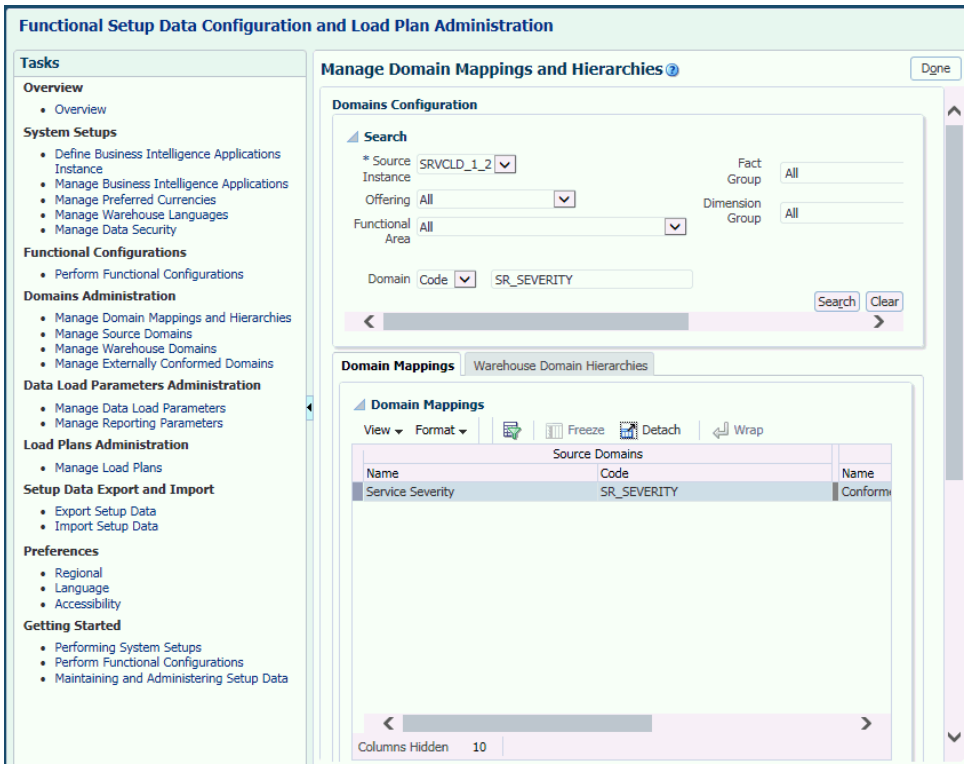
Mapping Domain Member Values for Oracle Service Cloud Source System

You must map domain member values of STATUS and SEVERITY codes for the Oracle Service Cloud source system. Domain Mappings specify how data in a source system is extracted and loaded into Oracle Business Analytics Warehouse.

Use the Manage Domain Mappings and Hierarchies link in the Configuration Manager.

To map domain member values:

1. In Configuration Manager, select the Manage Domain Mappings and Hierarchies link in the Tasks pane.
2. In the Domains Configuration Search area:
   - Select Oracle Service Cloud as the Source Instance.
   - Select code SR_SEVERITY in the Domain field.



- Click Search. Similarly, search for code SR_STATUS

(Optional) Enter the result of the step here.

3. In the Domain Member Mapping region, map the following domain member values for Oracle Service Cloud source system by clicking the Edit icon:
   - SR_SEVERITY, available values are:
     - CRITICAL
     - HIGH
     - MEDIUM
     - LOW
   - SR_STATUS, available values are:
     - OPEN
     - CLOSED
4. Click **Save and Close**, then click **Done**.

Managing Data Load Parameters for Oracle Service Cloud Source System

Configure the source used for purging or archiving records by setting applicable value for the Source Archive Purge Source data load parameter.

When you physically delete incidents from your Oracle Service Cloud instance, they are marked for `Soft Delete` in the Oracle BI Applications data warehouse. Soft-deleted rows in the data warehouse are available for reporting or analysis. If you periodically

purge/archive incidents rather than physically delete them from your Oracle Service Cloud instance, they are still physically deleted from the Incidents table in your Oracle Service Cloud instance. Hence, the Oracle BI Applications ETL also marks these incidents for `Soft Delete` which means they too are not available for reporting or analysis.

If you want purged/archived incidents to be available for reporting and analysis, then use this parameter to enter the list of incident sources that you use in your Oracle Service Cloud instance to denote purged/archived incidents. When editing this parameter using the Manage Data Load Parameters dialog in Configuration Manager, the application displays all available incident sources in the left pane. Choose and move to the right pane the list of incident sources that indicate purged/archived incidents. This prevents the Oracle BI Applications ETL from marking these incidents for `Soft Delete` and therefore they are available for reporting and analysis.

7

Setting Up Oracle Taleo Cloud Data Source

Follow this procedure to deploy Oracle Business Intelligence Applications (Oracle BI Applications) with Oracle Taleo Cloud source system.

Topic

- Registering a Taleo Cloud Source System

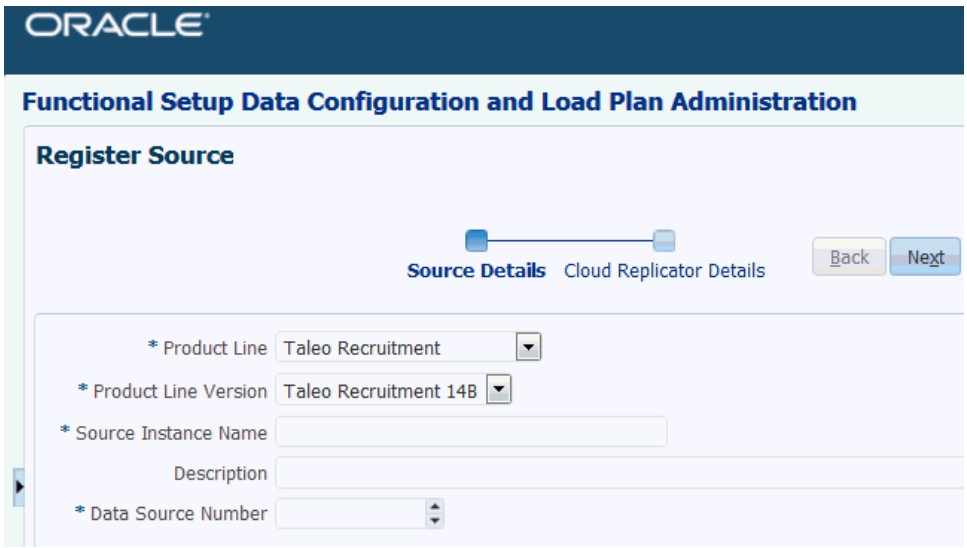
Registering a Taleo Cloud Source System

Use these instructions to register the applicable Taleo Cloud source system.

To register Taleo Cloud source system:

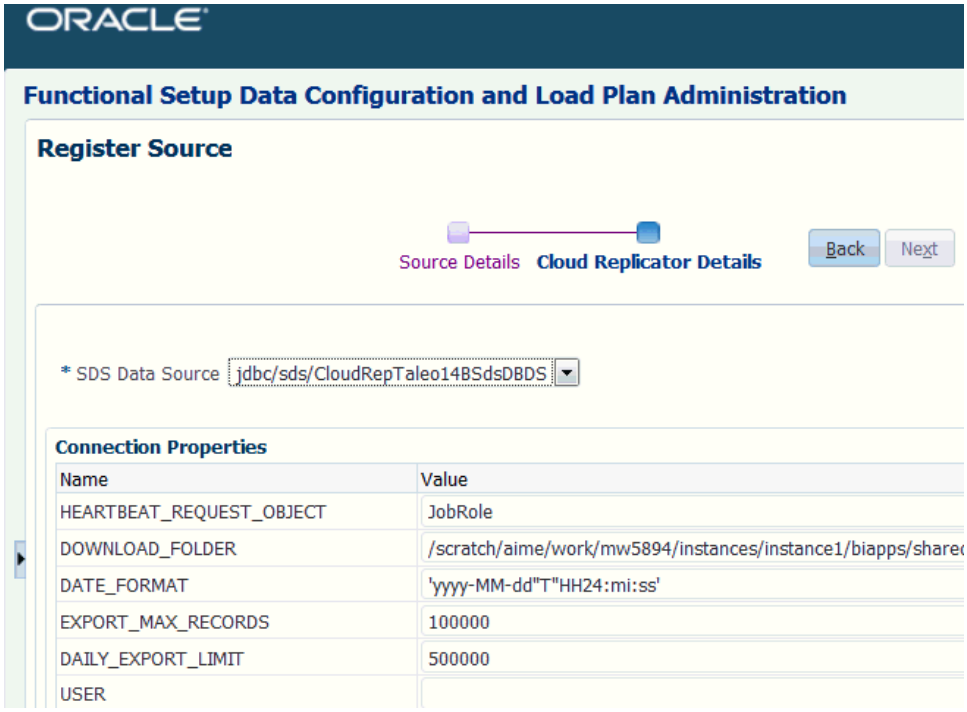
You must have the Taleo Cloud source details.

1. Log in to Oracle BI Applications Configuration Manager as a user that has Enterprise Role - **ASM_APPLICATION_IMPLEMENTATION_ADMIN_ABSTRACT**.
2. In Configuration Manager, select the **Define Business Intelligence Applications** link in the System Setups area on the Tasks pane.
3. Click the **Add** icon (+) to register a new source system using the Register Source dialog.
4. At the Register Source dialog, specify the following details, then click **Next**:



- Product Line — Select your source system type. For example, Taleo Recruitment.
- Product Line Version — Select the data source version that is deployed.
- Source Instance Name — Enter a short readable name to identify this data source in Configuration Manager.
- Description — (Optional) Enter a short description to help Administrators and Implementers identify and use this data source in Configuration Manager.
- Data Source Number — Enter an integer or use the spinner to specify a number to identify data in the OTBI-Enterprise data warehouse. This number must be unique within Configuration Manager. The number 999 is reserved, and should not be used.

5. At the Cloud Replicator Details dialog, specify connection properties, then click **Save**:



Note:

Taleo enforces daily and transaction limits for bulk data export requests. During a Taleo source connection registration, the default values are displayed (**DAILY_EXPORT_LIMIT=500000**, **EXPORT_MAX_RECORDS=100000**. If the Taleo zone limits are increased, it's recommended to update the Daily Limit on the Replicator to match the zone value or update it to 0. **DAILY_EXPORT_LIMIT=0** (0 indicates unlimited).

During a LP execution, if a replication job hits the Taleo Daily Limit, then the job is paused for 24 hours but the status of the ODI LP step is marked as Completed. Subsequent LP steps of replication for Taleo source would complete without actually running the replication and rest of the ETL steps (SDE, SIL) are also completed for Taleo source without running the ETL. The next day, LP will trigger the rest of the replication and complete the ETL. The paused job is triggered automatically and runs the replication only for the entity which first hits the daily limit. For replicating rest of the entities, a new LP instance needs to be triggered after 24 hours of the previous LP.

8

Deploying the ODI Repository for Non-Oracle Source Databases

This section provides information about deploying the Oracle Data Integrator (ODI) repository for non-Oracle source databases.

During installation and setup of Oracle Business Intelligence Applications (Oracle BI Applications), if your source database is Oracle, then an instance of the ODI repository is automatically deployed and no further setup steps are required. If your source database is MS SQL Server, UDB DB2, or UDB 400, then you must perform these configuration steps to deploy a new instance of the ODI repository.

If you have multiple sources and one or more of the source databases is non-Oracle, you must follow these procedures for all source databases, including any Oracle source databases. The following non-Oracle source databases are certified:

- JD Edwards (JDE) 91, JDE 90 Adaptors are certified with DB2 (AS 400) , DB2 UDB (DB2 v9.7.0.5) and Microsoft SQL Server 2008 source databases.
- People Soft 92 HCM is certified with Microsoft SQL Server 2014 source databases.
- People Soft 90 SIA (Student Information Analytics) is certified with Microsoft SQL Server 2012 source databases.

Perform these steps in order:

1. Export Security Settings from Original ODI Repository.
2. Exporting Topology Settings from Original ODI Repository.
3. Create a New Master ODI Repository.
4. Connect to the New Master ODI Repository.
5. Create a New Work Repository.
6. Import Source Adaptor Metadata Content into the New ODI Repository.
7. Import Security Settings Into the ODI Repository.
8. Importing Connection Details Which Configures the Data Servers.

Next Steps:
In Oracle BI Applications Configuration Manager, register sources, configure parameters, and generate load plans.

> **Note:**
>
> After you perform these procedures for a particular source and you then want to add a new source, you only need to perform the steps in Importing Source Adapter Metadata Content into the New ODI Repository. This is true regardless of the database technology of the second source.
>
> For example, if you have a PeopleSoft 9.0 source on a SQL Server database, then you would perform the steps in Exporting Security Settings from Original ODI Repository through Importing Connection Details Which Configures the Data Servers. If you then wanted to add a second source, for example Siebel 8.1 (on an Oracle, DB2, or SQL Server database), you would only need to perform the steps in Importing Source Adapter Metadata Content into the New ODI Repository.

Exporting Security Settings from Original ODI Repository

You need to export the security settings from the ODI Repository that were created using the Oracle Business Analytics Suite RCU.

1. Log into ODI Studio.
2. Navigate to **Topology**, and select **Export Security Settings**.
3. Save the export file to a local directory.

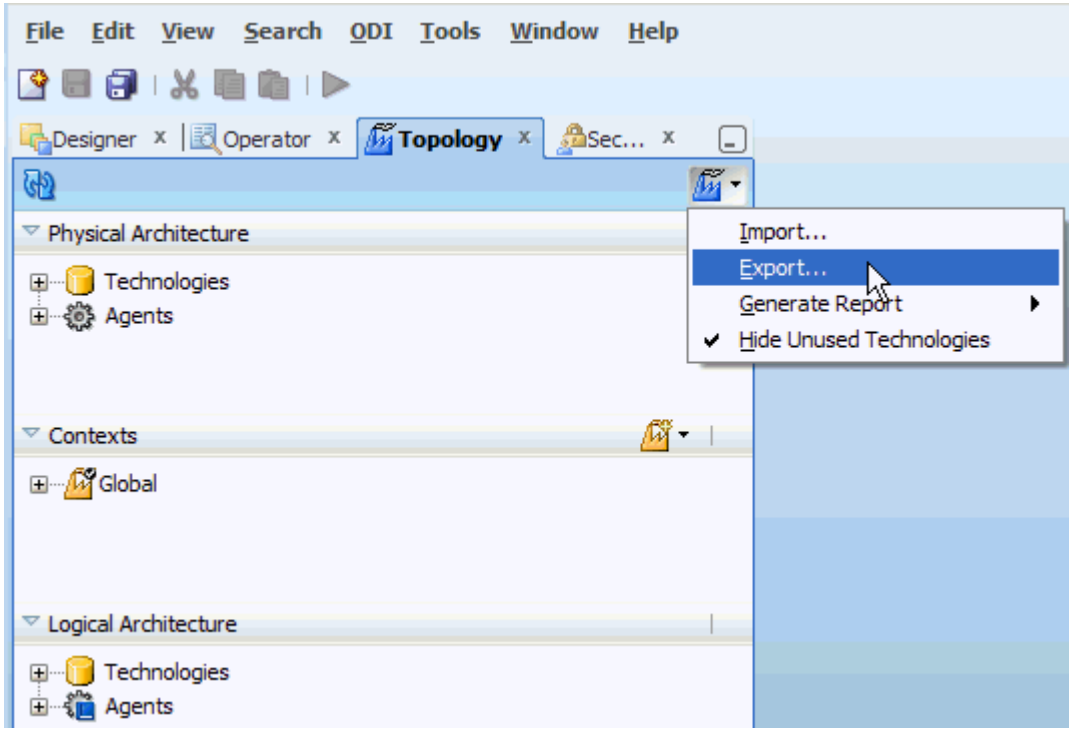
   You will use this export file to import the security settings in a later step.

Exporting Topology Settings from Original ODI Repository

You need to export the topology settings from the Original ODI Repository that were created using the Oracle Business Analytics Suite RCU.

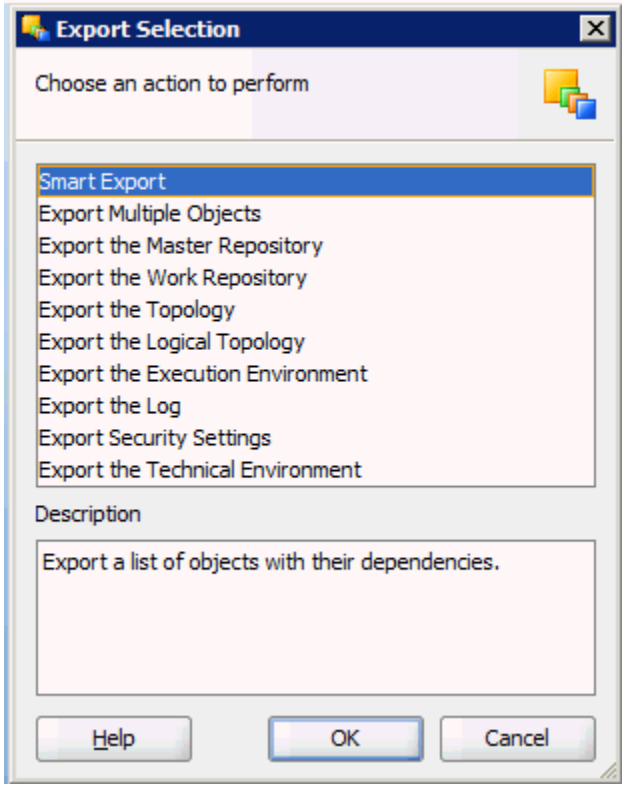
To export the topology settings from original ODI repository:

1. Launch the ODI Studio client and connect to the original ODI repository.
2. Navigate to the Topology tab. From the Connect Navigator (Topology icon dropdown on the top right side of the navigator pane), select **Export**. As part of the procedures described below, you will export files to a local directory.

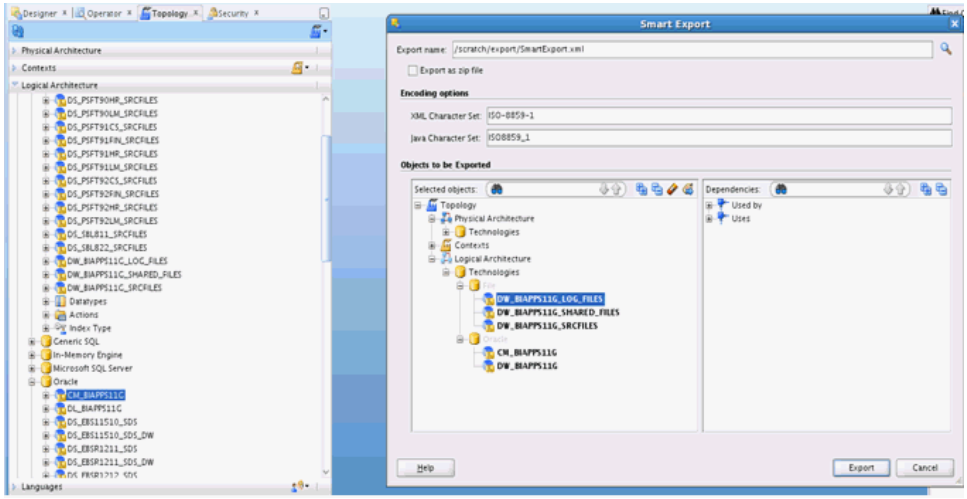


3. Launch the Smart Export wizard from the Export Selection dialog.

Exporting Connections



4. Drag the below logical schemas **Objects to be Exported** window as shown below. Provide a meaningful name for the export file. Click **Export**.

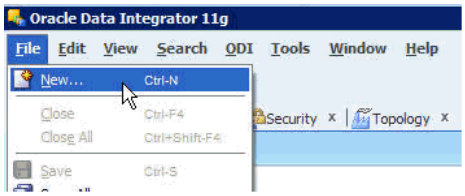


This will export the logical and physical topology including assigned Data source Num ID values and database connect details.

Creating a New Master Repository

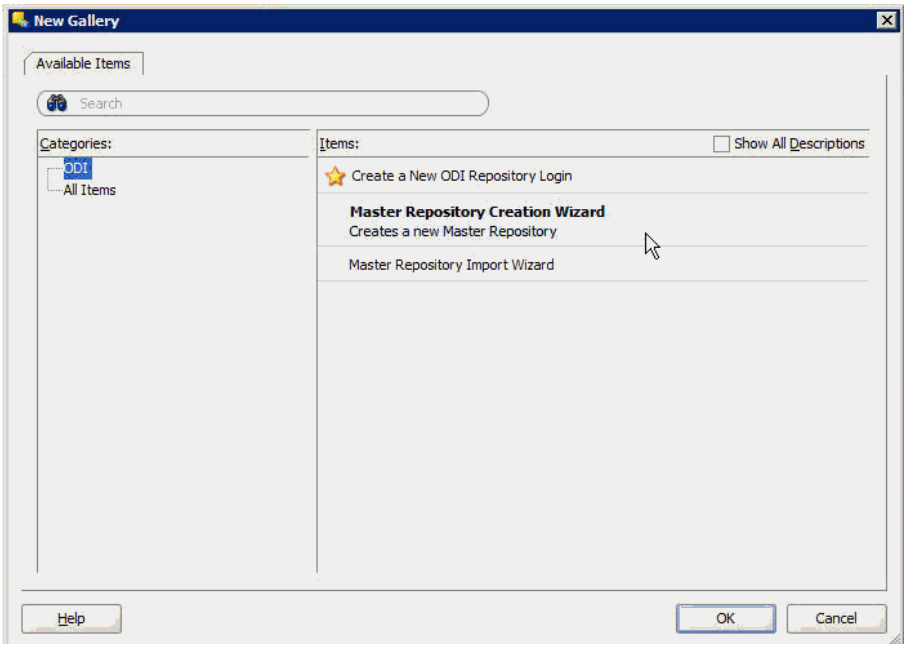
Use ODI Studio to create a new Master Repository.

1. Launch ODI Studio.
2. Open the New Gallery by selecting **File** and then **New**.



3. In the Categories tree of the New Gallery, select **ODI**.
4. From the Items list, select **Master Repository Creation Wizard**, and click **OK**.

   The Master Repository Creation Wizard opens.

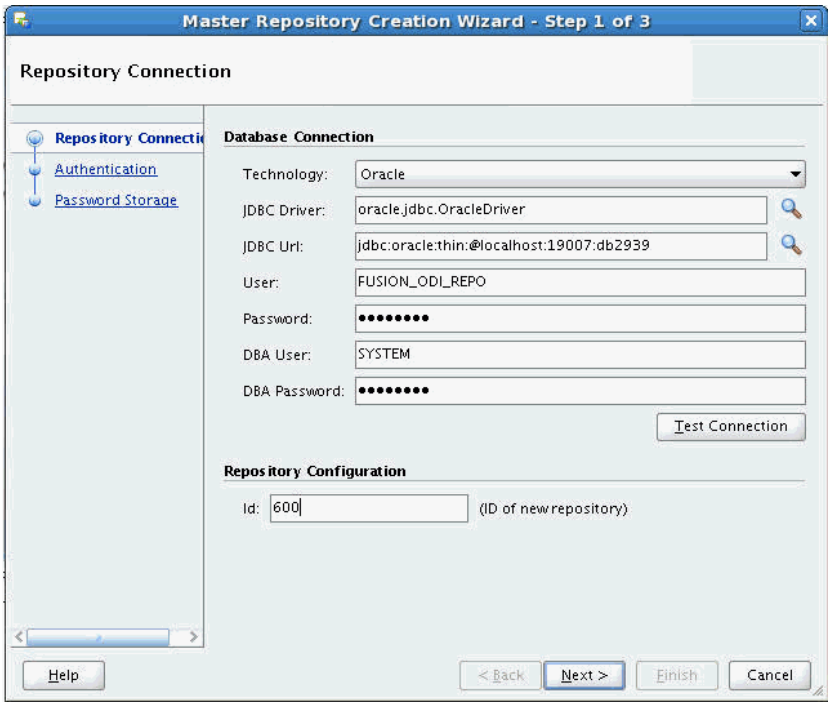


5. Specify the Database Connection properties:

Property	Description
Technology	Select the technology that will host your Master Repository.
JDBC Driver	The driver used to access the technology that will host the repository.
JDBC URL	The URL used to establish the JDBC connection to the database. Note that the JDBC Driver and URL properties are synchronized and the default values are technology dependent.
User	The name of the schema where the Master Repository will be stored.*
Password	The password for the schema.
DBA User	The user ID on the database with DBA privileges such as SYSTEM. Do not use SYS, which requires logging in as SYSDBA.
DBA Password	The password for the DBA User.

Note:

*Use the same credentials used by the installer to create the original repository.

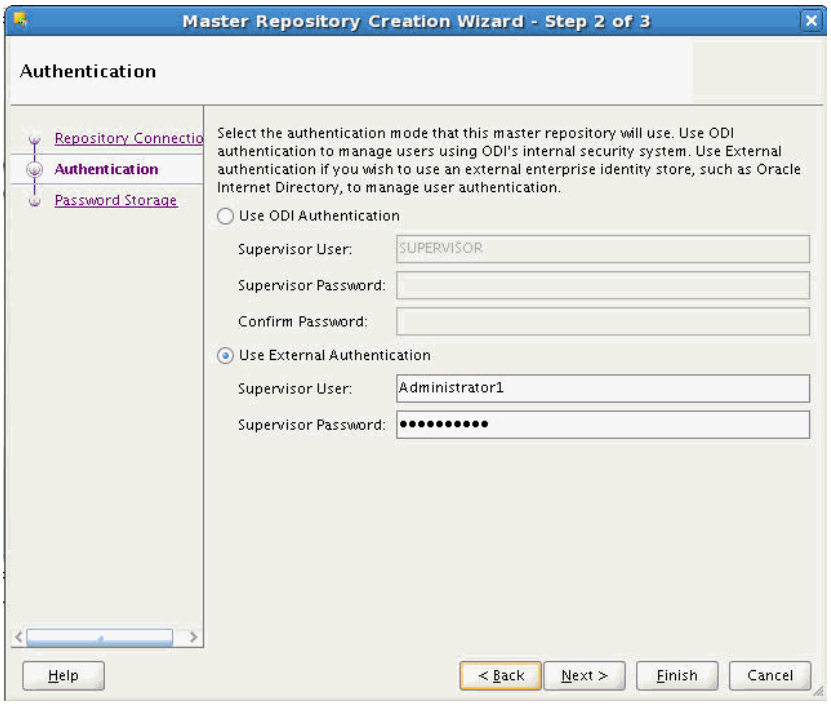


6. In the Repository Configuration area, enter a unique, three-digit numeric ID.

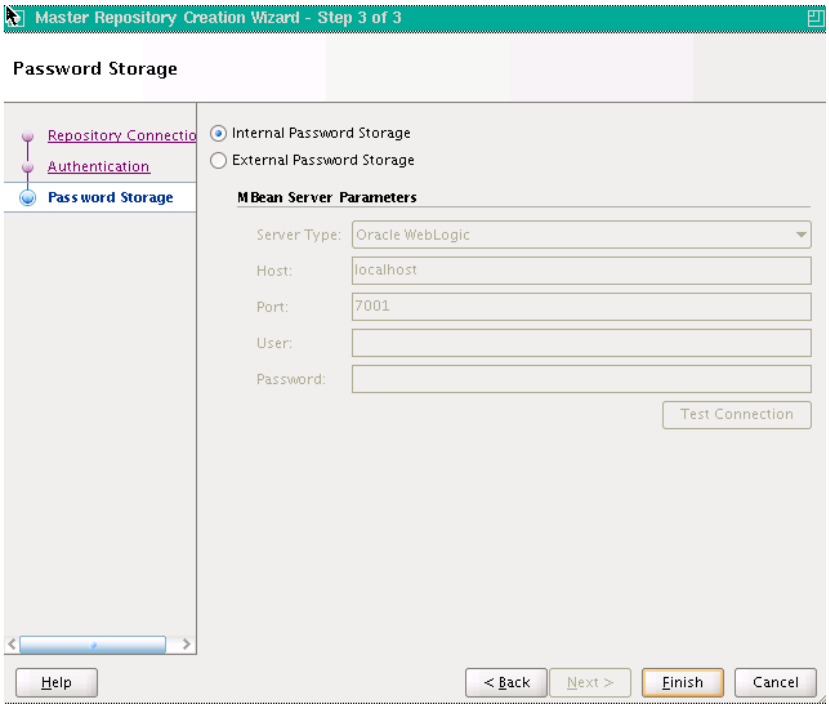
> **Note:**
>
> Ensure that the repository ID is a value greater than the original repository ID value of 500. This prevents import issues while importing exported (backup) files from your original repository.

7. (Optional) Click **Test Connection** to test the connection to the Master Repository, then click **Next**.
8. In the Authentication screen, select **Use External Authentication**, and specify these properties, then click **Next**:

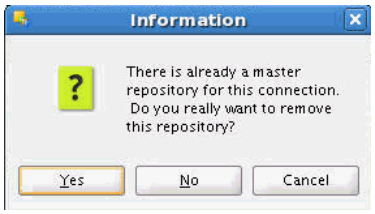
Property	Description
Supervisor User	The user name of the ODI Supervisor that was specified during the initial Oracle BI Applications installation.
Supervisor Password	The Supervisor User's password that was specified during the initial Oracle BI Applications installation.



9. In the Password Storage screen, select **Internal Password Storage**.



10. Click **Yes** to indicate you want to remove the existing repository.



11. In the Master Repository Creation Wizard, click **Finish**.

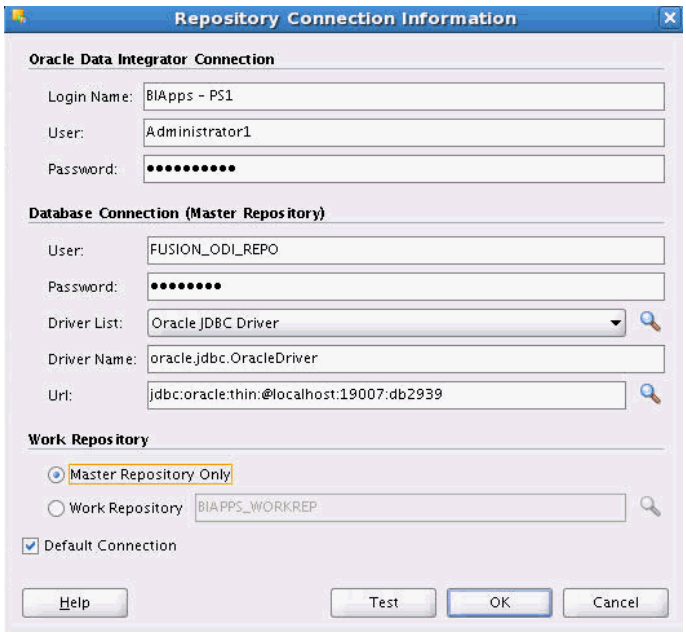
Connecting to the New Master Repository

In this procedure, you create a new Master Repository login connection.

1. Open the New Gallery by selecting **File** and then **New**.
2. In the Categories tree of the New Gallery, select **ODI**.
3. From the Items list, select **Create a New ODI Repository Login**.
4. Click **OK**.

   The Repository Connection Information dialog opens.
5. Specify the ODI connection details:

Property	Description
Login name	A connection alias.
User	The ODI Supervisor user name that was defined during the Oracle BI Applications installation. Note that the Supervisor user name is case sensitive and must be entered exactly as previously defined.
Password	The ODI Supervisor password that was defined during the Oracle BI Applications installation.



6. Specify the Database Connection (Master Repository) details:

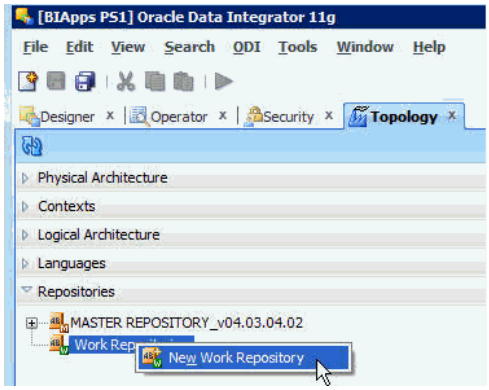
Property	Description
User	The database user login of the schema that contains the Master Repository.
Password	The User password.
Driver List	Select the driver required to connect to the database supporting the Master Repository.
Driver Name	The complete driver name.
URL	The URL used to establish the JDBC connection to the database hosting the repository.

7. In the Work Repository area, select **Master Repository Only**.
8. (Optional) Click **Test** to verify that the connection is working.
9. Click **OK**.

Creating a New Work Repository

Use this procedure to create a new Work Repository.

1. In the Topology Navigator, go to the Repositories panel.
2. Right-click the **Work Repositories** node, and select **New Work Repository**.



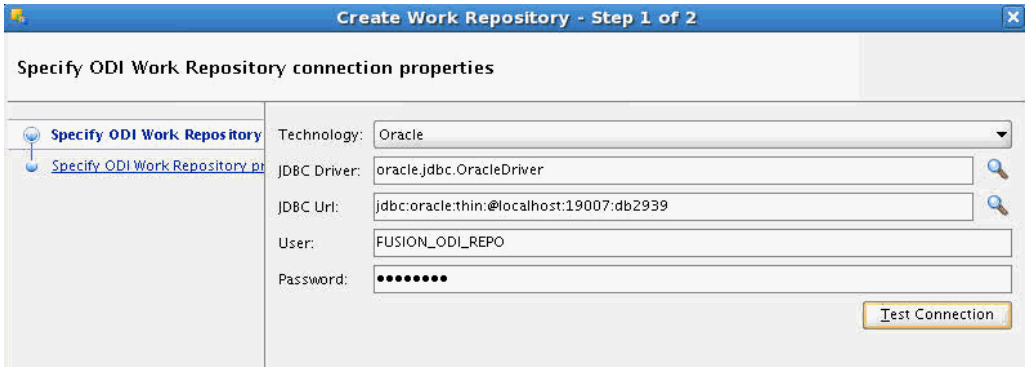
The Create Work Repository Wizard opens.

3. Specify the ODI Work Repository connection details.

   The Work Repository needs to be in the same schema as the Master Repository. Provide the same credentials used to create the Master Repository.

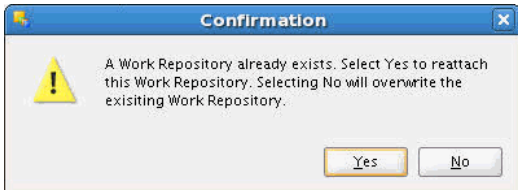
Property	Description
Technology	Select the technology that will host your Work Repository.
JDBC Driver	The driver used to access the technology that will host the repository.

Property	Description
JDBC URL	The complete path of the data server to host the Work Repository. Note that the JDBC Driver and URL properties are synchronized and the default values are technology dependent.
User	The name of the schema where the Work Repository will be stored.
Password	The password for the schema.



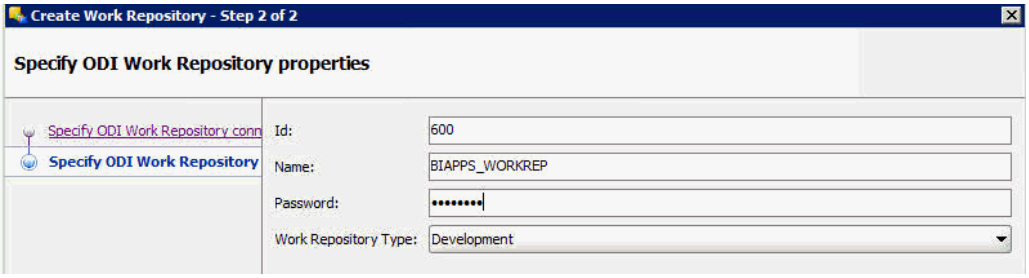
4. (Optional) Click **Test Connection** to verify the connection is working, then click **Next**.

   An informational dialog notifies you that a Work Repository already exists.

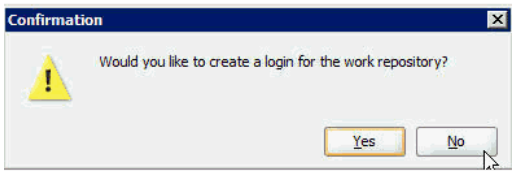


5. Click **No** to overwrite the existing repository.
6. Specify the Work Repository properties:

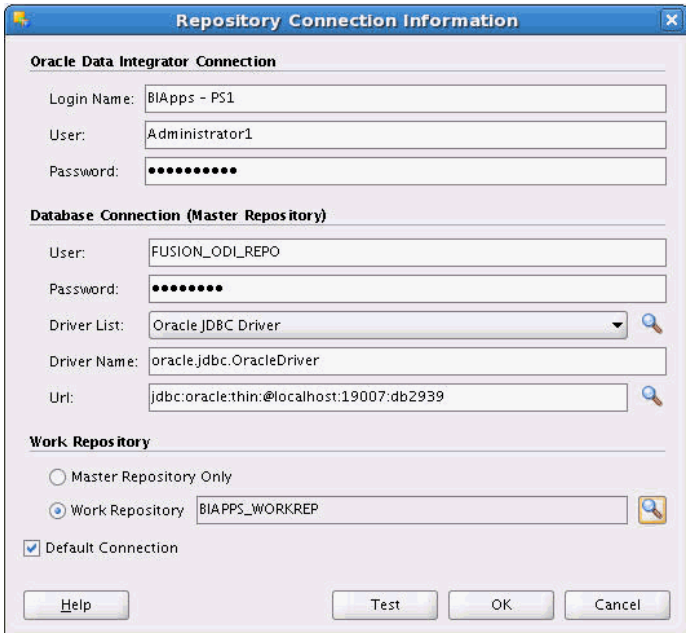
Property	Description
ID	Enter the same ID used when creating the new Master Repository.
Name	A name for the Work Repository.
Password	This field is optional. The value can be any value. It does not correspond to the ODI Supervisor or database passwords.
Work Repository Type	Select **Development**.



7. Click **Finish**.



8. When the Confirmation dialog asks if you would like to create a login for the Work Repository, click **No**.
9. Edit the repository connection details to connect to the Work Repository:
   a. Log off of the Work Repository.
   b. Open the Repository Connection Information dialog.
   c. In the Work Repository area, select the **Work Repository** option, and then select the name of the Work Repository you just created.



   d. Click **OK**.

Importing Source Adaptor Metadata Content into the New ODI Repository

In this procedure, you import source-specific metadata content into the new ODI Repository by running the command line utility.

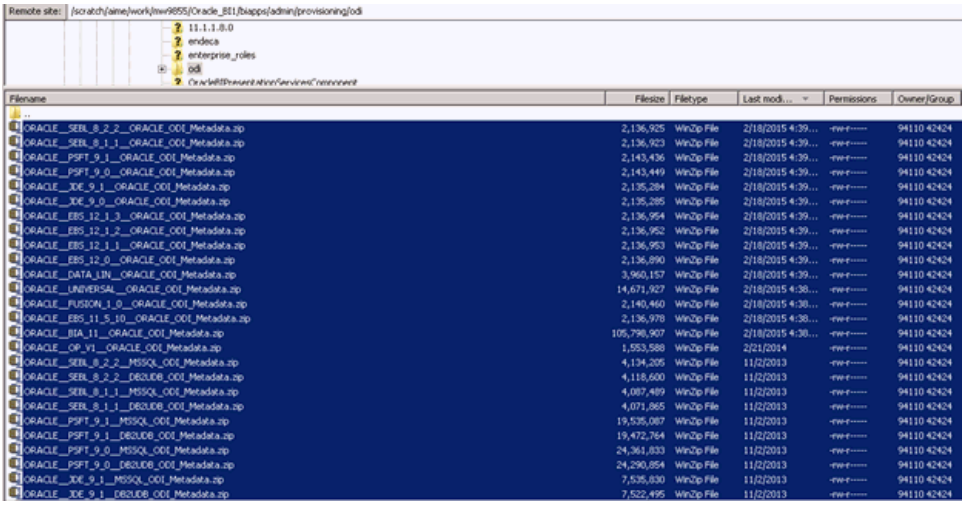
- Preparing to Import Source Adaptor Metadata Content
- Running the Command Line Utility to Import Source Adaptor Metadata Content

Preparing to Import Source Adaptor Metadata Content

Use these instructions to import source-specific metadata content into the new ODI Repository.

1. Locate the directory `<BI_ORACLE_HOME>\biapps\admin\provisioning\odi`.

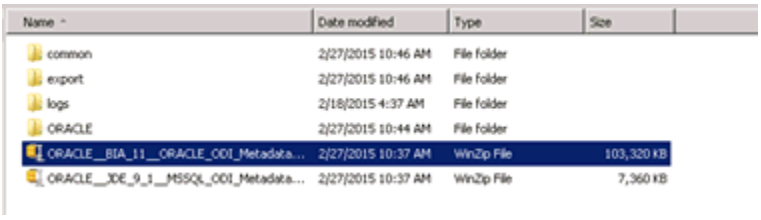
   The `.zip` files in this directory contain the source-specific metadata content that you will import into the new repository. The naming convention for the `.zip` files is `<Source adapter>_<database technology>_ODI_Metadata.zip`.



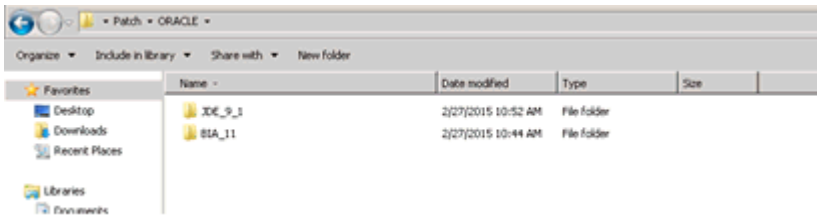
2. Unzip `ORACLE__BIA_11__ORACLE_ODI_Metadata.zip` first and then unzip the appropriate metadata content file for your source adapter and database technology.

> **Note:**
>
> While unzipping files, do not unzip into a separate folder. Use Extract here option from unzipping tools to unzip all metadata zip files.

For example, once you unzip files, you will be seeing the following folder structure:



Inside ORACLE folder, you will see the following folders:



3. Locate the file `bia-odi-util.jar`, which is stored in `C:\<Middleware Home>\<BI_ORACLE_HOME>\biapps\biaodiutil\lib`.
4. Locate the file `jps-config-jse.xml`, which is stored in `C:\<Middleware Home>\user_projects\domains\bifoundation_domain\odi-client-config\embedded`.

   In the command, this file is referred to as `JPSCONFIGFILE`.
5. Create a logs directory to store the logs of the import process.

   In the command, this directory is referred to as `LOGDIR`.
6. Locate the ODI Home directory.

   In the command, this directory is referred to as `ODI_HOME`.
7. Obtain these ODI Repository connection details:
   - JDBC URL for the ODI Repository database
   - JDBC driver
   - Work Repository name
   - ODI Repository database user name and password
   - ODI user and password

   This connection information is displayed in ODI Studio in the Repository Connection Details dialog.

Running the Command Line Utility to Import Source Adaptor Metadata Content

Use this procedure to import the metadata content files into the new ODI Repository. You will first import the metadata for Oracle BI Applications, after which you will import the metadata for the appropriate source adaptors.

For potential performance enhancement, Oracle recommends running the command line utility on the database server machine.

To import metadata content by running the command line utility:

1. Open a command line utility.
2. Navigate to the `C:\<Middleware Home>\<BI_ORACLE_HOME>\biapps\biaodiutil\lib` directory.
3. Run the following command to import the Oracle BI Applications metadata first, which is mandatory before importing any source specific metadata content.

   The PLV code for this adaptor is BIA_11.

   On Windows:

```
<JAVA_HOME>\bin\java.exe \-client \-Xms32m \-Xmx1024m \-classpath <ODI_HOME>
\oracledi.sdk\lib\*;<ODI_HOME>\inventory\Scripts\ext\jlib\*;<ODI_HOME>\modules
\oracle.idm_11.1.1\*;<ODI_HOME>\modules\oracle.jps_11.1.1\*;<BI_ORACLE_HOME>
\biapps\lib\*;<BI_ORACLE_HOME >\biapps\biaodiutil\lib\bia-odi-util.jar
oracle.apps.biaodiutil.Import MODE=IMPORT FILEDIR=<EXP_FILE_DIR> PLV=<PLV_CODE>
JPSCONFIGFILE=<JPS_CONFIG_FILE> LOGDIR=<LOG_DIR>
```

For example:

```
E:\app\oracle\MW_HOME\Oracle_BI1\jdk\bin\java.exe -client -Xms32m -Xmx1024m -
classpath E:\app\oracle\MW_HOME\Oracle_ODI1\oracledi.sdk\lib\*;E:\app\oracle
\MW_HOME\Oracle_ODI1\inventory\Scripts\ext\jlib\*;E:\app\oracle\MW_HOME
\Oracle_ODI1\modules\oracle.idm_11.1.1\*;E:\app\oracle\MW_HOME
\Oracle_ODI1\modules\oracle.jps_11.1.1\*;E:\app\oracle\MW_HOME\Oracle_BI1\biapps
\lib\*;E:\app\oracle\MW_HOME\Oracle_BI1\biapps\biaodiutil\lib\bia-odi-util.jar
oracle.apps.biaodiutil.Import MODE=IMPORT FILEDIR=E:\temp PLV=BIA_11
JPSCONFIGFILE=E:\app\oracle\MW_HOME\user_projects\domains\bifoundation_domain
\odi-client-config\embedded LOGLEVEL=5 LOGDIR=E:/app/oracle/MW_HOME/logs/
DB2SetupLog
```

On UNIX/Linux:

```
<JAVA_HOME>\bin\java.exe \-client \-Xms32m \-Xmx1024m \-classpath "<ODI_HOME>/
oracledi.sdk/lib/*:<ODI_HOME>/inventory/Scripts/ext/jlib/*:<ODI_HOME>/modules/
oracle.idm_11.1.1/*:<ODI_HOME>/modules/oracle.jps_11.1.1/*:<BI_ORACLE_HOME>/
biapps/lib/*:<BI_ORACLE_HOME >/biapps/biaodiutil/lib/bia-odi-util.jar"
oracle.apps.biaodiutil.Import MODE=IMPORT FILEDIR=<EXP_FILE_DIR> PLV=<PLV_CODE>
JPSCONFIGFILE=<JPS_CONFIG_FILE> LOGDIR=<LOG_DIR>
```

For example:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=BIA_11 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs
```

4. Run the following command to import the source-specific metadata content. The PLV code and SRCTECH for the source-specific metadata content are given in the following parameters table.

   This table describes the parameters:

Parameter	Description
MODE	(Mandatory) Possible values: • IMPREGEN - Use this mode to import the adaptor metadata content and generate scenarios for that adaptor. • IMPORT — Use this mode to import metadata content only, without generating scenarios. A parameter file is generated that allows you to do the scenario generation at a later time. • SCEREGEN — Use this mode to generate scenarios only. Before running this mode, you need to have imported content using the IMPORT mode so that the parameter file required for scenario generation is already present.
FILEDIR	(Mandatory) The complete path for the export file directory files.

CONNFILE	(Optional) The complete path of the file containing the Connection Details. If this parameter is not used, the utility will prompt for the connection details.
	An example of a connection file is as follows:
	`# ================================`
	`# ODI Connection Information`
	`# ================================`
	`# Connection Information for Destination Oracle Data`
	`#Integrator Repository`
	`MasterJDBCDriver=oracle.jdbc.OracleDriver`
	`MasterJDBCUrl=jdbc:oracle:thin:@<host>:1521:orcl`
	`MasterJDBCUser=ODI_REP`
	`MasterJDBCPass=odirep`
	`WorkName=BIAPPS_WORKREP`
	`ODIUser=SUPERVISOR`
	`ODIPass=odipass`

LOGLEVEL	(Optional) Possible values are 1, 3, or 5. The default value is 1, with 5 being the most verbose.
LOGDIR	The complete path for the log directory. The following log files are created: • Summary — Contains high level log information. The naming convention is Summary_ImportUtility_<DATE_TIME><ADAPTOR><SRCTECH>_log. • Import — Contains details about the import. Has a log and error file. The naming convention is BasicImport_<DATE_TIME>_<ADAPTOR>_log. • Scenario Generation — Contains details about the scenario generation. Has a log and error file. The naming convention is RegenScen_<DATE_TIME>_<ADAPTOR_MAPPING_FOLDER>_log.

Parameter	Description
PLV	(Mandatory) The PLV code for the adaptor being imported. Possible values: • AGILE_PLM_9_3_1 • AGPLM_9_3_2 • AILE_GILE_PLM_PROC_6_1 • EBS_11_5_10 • EBS_12_0 • EBS_12_1_1 • EBS_12_1_2 • EBS_12_1_3 • EBS_12_2 • JDE_9_0 • JDE_9_1 • PSFT_9_0 • PSFT_9_1 • PSFT_9_2 • SEBL_8_1_1 • SEBL_8_2_2
SRCTECH	(Mandatory) The source technology for the adaptor being imported. Possible values: • For IBM DB2/400: **IBM_DB2_400** • For IBM DB2 UDB: **IBM_DB2_UDB** • For SQL Server: **MICROSOFT_SQL_SERVER** • For ORACLE: **ORACLE** • For Oracle Fusion (via BI Server): **ORACLE_BI** If you have multiple sources on both Oracle and non-Oracle databases, you need to import the PLV metadata for the Oracle database using ORACLE (or ORACLE_BI for Oracle Fusion sources) as the SRCTECH value.
JPSCONFIGFILE	(Mandatory if the repository has already been enabled for external authentication.) The path and name of the JPSCONFIGFILE.
SSOFILE	(Optional) The path and name of the SSO file.

On Windows:

For example:

```
E:\app\oracle\MW_HOME\Oracle_BI1\jdk\bin\java.exe -client -Xms32m -Xmx1024m -
classpath E:\app\oracle\MW_HOME\Oracle_ODI1\oracledi.sdk\lib\*;E:\app\oracle
\MW_HOME\Oracle_ODI1\inventory\Scripts\ext\jlib\*;E:\app\oracle\MW_HOME
\Oracle_ODI1\modules\oracle.idm_11.1.1\*;E:\app\oracle\MW_HOME
\Oracle_ODI1\modules\oracle.jps_11.1.1\*;E:\app\oracle\MW_HOME\Oracle_BI1\biapps
\lib\*;E:\app\oracle\MW_HOME\Oracle_BI1\biapps\biaodiutil\lib\bia-odi-util.jar
oracle.apps.biaodiutil.Import MODE=IMPORT FILEDIR=E:\temp PLV=JDE_9_1 SRCTECH=
MICROSOFT_SQL_SERVER JPSCONFIGFILE=E:\app\oracle\MW_HOME\user_projects\domains
\bifoundation_domain\odi-client-config\embedded LOGLEVEL=5 LOGDIR=E:/app/oracle/
MW_HOME/logs/DB2SetupLog
```

On Linux:

For example:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
```

```
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=JDE_9_1 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=MICROSOFT_SQL_SERVER
```

Repeat Step 4 if you want to import any other source specific metadata content by choosing the appropriate PLV code and SRCTECH parameter.

Following are few sample commands for importing other source specific metadata:

JDE_9_0 for MSSQL:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=JDE_9_0 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=MICROSOFT_SQL_SERVER
```

JDE_9_0 for DB2UDB:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=JDE_9_0 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=IBM_DB2_UDB
```

JDE_9_0 for DB2400:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
```

```
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=JDE_9_0 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=IBM_DB2_400
```

JDE_9_0 for ORACLE:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=JDE_9_0 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=ORACLE
```

JDE_9_1 for MSSQL:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=JDE_9_1 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=MICROSOFT_SQL_SERVER
```

JDE_9_1 for DB2UDB:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=JDE_9_1 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=IBM_DB2_UDB
```

JDE_9_1 for DB2400:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
```

```
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=JDE_9_1 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=IBM_DB2_400
```

JDE_9_1 for ORACLE:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=JDE_9_1 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=ORACLE
```

PSFT_9_2 for MSSQL:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=PSFT_9_2 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=MICROSOFT_SQL_SERVER
```

PSFT_9_2 for DB2UDB:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=PSFT_9_2 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=IBM_DB2_UDB
```

PSFT_9_2 for DB2400:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=PSFT_9_2 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=IBM_DB2_400
```

PSFT_9_2 for ORACLE:

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=PSFT_9_2 JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=ORACLE
```

UNIVERSAL ADAPTOR :

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=UNIVERSAL JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs SRCTECH=FILE
```

DATA LINEAGE ADAPTOR :

```
/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/modules/
oracle.idm_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/
middleware/Oracle_ODI1/modules/oracle.jps_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/
```

```
biapps/biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPORT FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/
PLV=DATA_LIN JPSCONFIGFILE=user_projects/domains/bifoundation_domain/odi-client-
config/embedded/jps-config-jse.xml LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/vv/logs
```

Note:

The following Tech switch adaptor metadata zip files are delivered along with the package scenarios, hence when you run the command line utility to import these files, ensure that you use import mode as `IMPORT` as seen in the above example:

```
ORACLE__BIA_11__ORACLE_ODI_Metadata.zip
ORACLE__JDE_9_0__DB2400_ODI_Metadata.zip
ORACLE__JDE_9_0__DB2UDB_ODI_Metadata.zip
ORACLE__JDE_9_0__MSSQL_ODI_Metadata.zip
ORACLE__JDE_9_1__DB2400_ODI_Metadata.zip
ORACLE__JDE_9_1__DB2UDB_ODI_Metadata.zip
ORACLE__JDE_9_1__MSSQL_ODI_Metadata.zip
ORACLE__PSFT_9_0__DB2UDB_ODI_Metadata.zip
ORACLE__PSFT_9_0__MSSQL_ODI_Metadata.zip
ORACLE__PSFT_9_1__DB2UDB_ODI_Metadata.zip
ORACLE__PSFT_9_1__MSSQL_ODI_Metadata.zip
ORACLE__PSFT_9_2__DB2UDB_ODI_Metadata.zip
ORACLE__PSFT_9_2__MSSQL_ODI_Metadata.zip
ORACLE__SEBL_8_1_1__DB2UDB_ODI_Metadata.zip
ORACLE__SEBL_8_1_1__MSSQL_ODI_Metadata.zip
ORACLE__SEBL_8_2_2__DB2UDB_ODI_Metadata.zip
ORACLE__SEBL_8_2_2__MSSQL_ODI_Metadata.zip
```

Apart from the above zip files, if you are importing any other adaptor metadata zip files into your repository, ensure that you use import mode as `IMPREGEN` which would import the adaptor metadata content and generate scenarios for that adaptor.

For example:

```
On Windows:

E:\app\oracle\MW_HOME\Oracle_BI1\jdk\bin\java.exe -client -Xms32m -
Xmx1024m -classpath E:\app\oracle\MW_HOME\Oracle_ODI1\oracledi.sdk\lib
\*;E:\app\oracle\MW_HOME\Oracle_ODI1\inventory\Scripts\ext\jlib\*;E:
\app\oracle\MW_HOME\Oracle_ODI1\modules\oracle.idm_11.1.1\*;E:\app
\oracle\MW_HOME\Oracle_ODI1\modules\oracle.jps_11.1.1\*;E:\app\oracle
\MW_HOME\Oracle_BI1\biapps\lib\*;E:\app\oracle\MW_HOME
\Oracle_BI1\biapps\biaodiutil\lib\bia-odi-util.jar
oracle.apps.biaodiutil.Import MODE=IMPREGEN FILEDIR=E:\temp
PLV=EBS_12_2 JPSCONFIGFILE=E:\app\oracle\MW_HOME\user_projects\domains
\bifoundation_domain\odi-client-config\embedded LOGLEVEL=5
LOGDIR=E:/app/oracle/MW_HOME/logs/DB2SetupLog SRCTECH=ORACLE

On UNIX/Linux:

/usr/bin/java -client -Xms32m -Xmx1024m -classpath "/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
oracledi.sdk/lib/*:/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/
biapps8/middleware/Oracle_ODI1/inventory/Scripts/ext/jlib/*:/
padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/
Oracle_ODI1/modules/oracle.idm_11.1.1/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_ODI1/
modules/oracle.jps_11.1.1/*:/padred2ap/bi/padred2_usmtnecdbinap08/
ipadred2/biapps8/middleware/Oracle_BI1/biapps/lib/*:/padred2ap/bi/
padred2_usmtnecdbinap08/ipadred2/biapps8/middleware/Oracle_BI1/biapps/
biaodiutil/lib/bia-odi-util.jar" oracle.apps.biaodiutil.Import
MODE=IMPREGEN FILEDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/
```

```
vv/ PLV=EBS_12_2 JPSCONFIGFILE=user_projects/domains/
bifoundation_domain/odi-client-config/embedded/jps-config-jse.xml
LOGDIR=/padred2ap/bi/padred2_usmtnecdbinap08/ipadred2/vv/logs
SRCTECH=ORACLE
```

5. Enter the ODI Repository connection details when prompted.
6. Monitor the process by viewing the command line window or the log files being written to the logs directory.

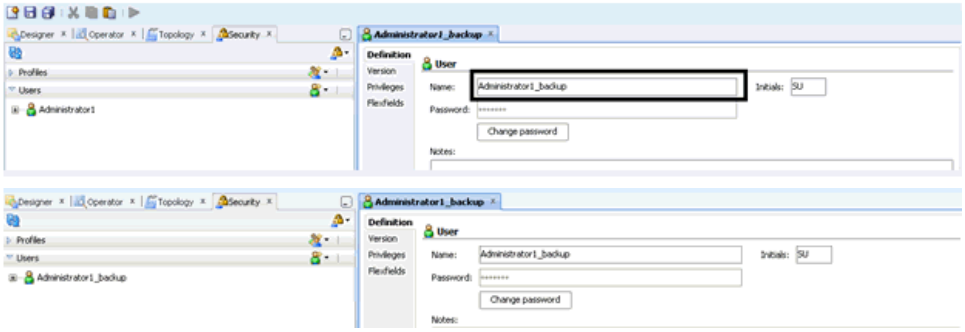
   This process can be lengthy and can last from 45 minutes to three hours, depending on the number of adaptors for which you are importing metadata content.
7. When the import process is complete, log into ODI Studio and verify the data stores and mappings for the new adaptor are present.
8. Repeat steps 1 through 7 for each adaptor you need to import, substituting the appropriate PLV code.

Importing Security Settings in to the ODI Repository

You can import security settings in to the ODI repository.

In this procedure you will import the security settings that you exported in Exporting Security Settings from Original ODI Repository.

1. Log in to ODI Studio.
2. Navigate to **Security**, and select **Users** tab to rename exiting `Administrator1` user to `Administrator1_backup` as shown below.



3. Navigate to **Security**, and select **Import Security Settings**.
4. In the Import Security Settings dialog, select **Import mode as Synonym Mode INSERT_UPDATE**, select**Import From a Folder**, and browse for the export file.
5. Click **Yes** in the Confirmation dialog.

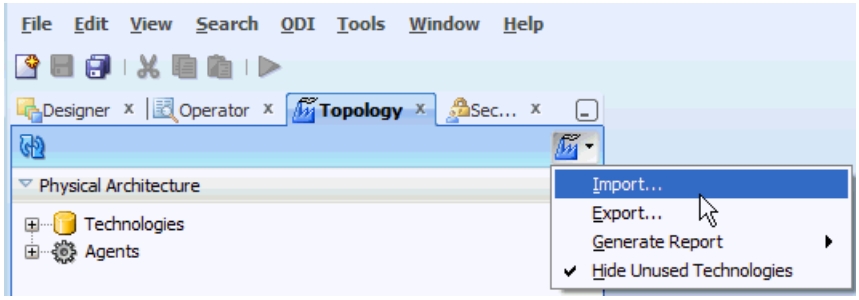
You can now log into the ODI Repository with the security settings configured when the ODI Repository was created using the Oracle Business Analytics Suite RCU.

Importing Connection Details Which Configures the Data Servers

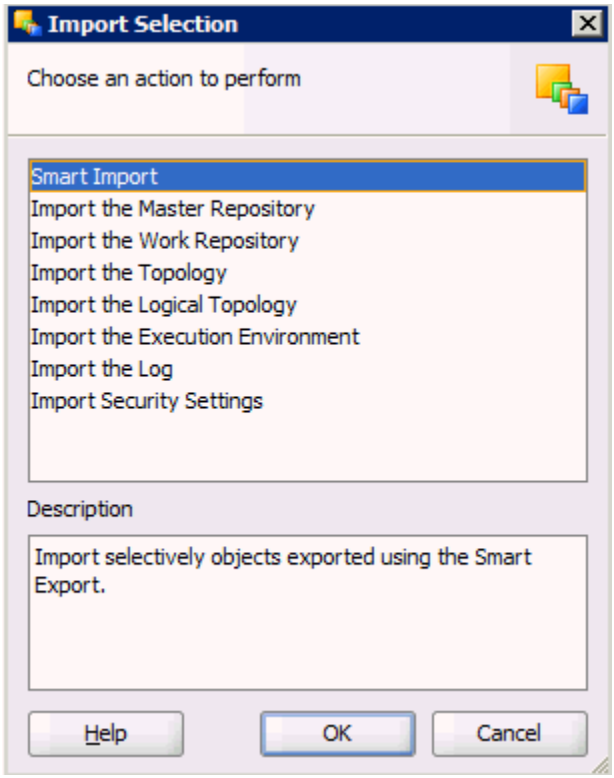
Use this procedure to perform post-import configurations.

1. Launch the ODI Studio client and connect to the ODI repository.
2. Navigate to the Topology tab. From the Connect Navigator (Topology icon dropdown on the top right side of the navigator pane), select **Import**.

   As part of the procedures described below, you will import the file created by exporting the 'Global' context in topic Exporting Topology Settings from Original ODI Repository.

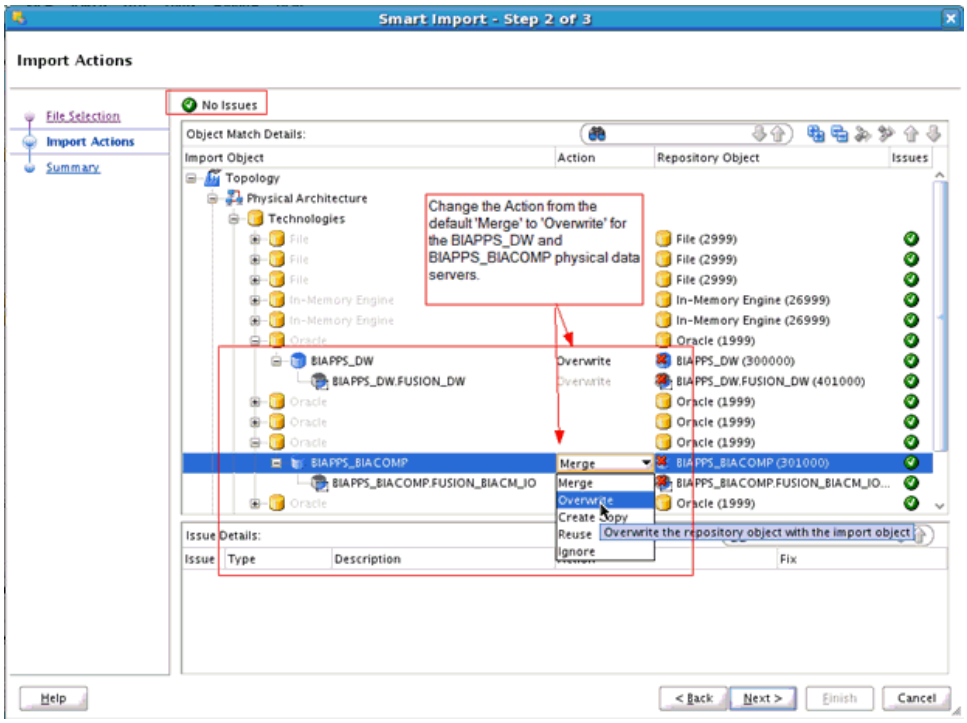


3. In the Import Selection dialog, select Smart Import.



4. In the File Selection screen, specify the export file created in topic Exporting Topology Settings from Original ODI Repository .

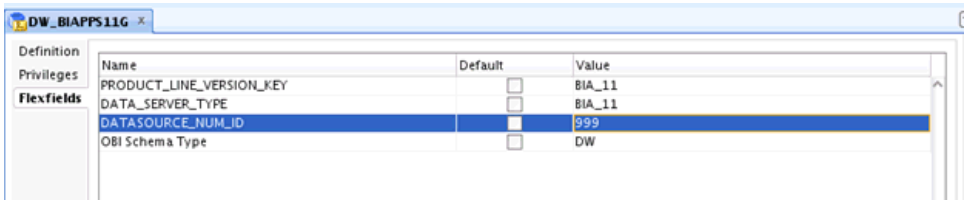
5. The default behavior of Smart Import is to Merge details in the target repository. Ensure that no issues are reported – if issues are reported, resolve them to ensure that the existing details are replaced by the details being imported. Select the **BIAPPS_DW** and **BIAPPS_BIACOMP** Data Servers, select the **Overwrite** option, and continue.



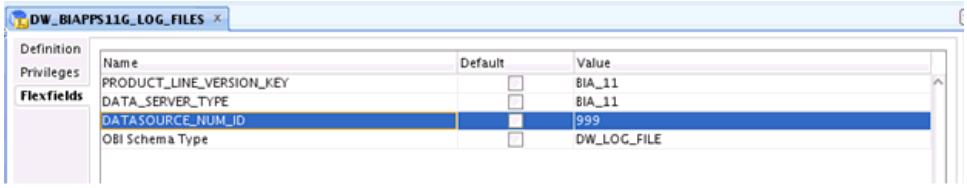
6. Verify the imported details.

   Verify that the following logical schemas have the correct data source `Num ID` value set in the **DATASOURCE_NUM_ID** flex field:

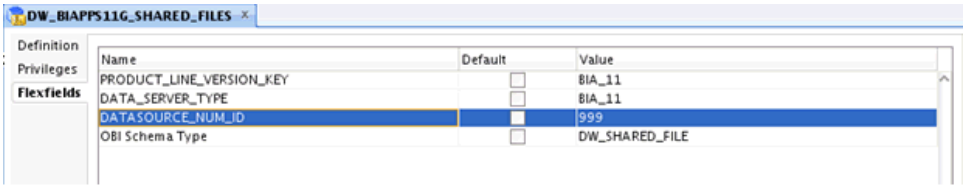
   - `DW_BIAPPS11G`



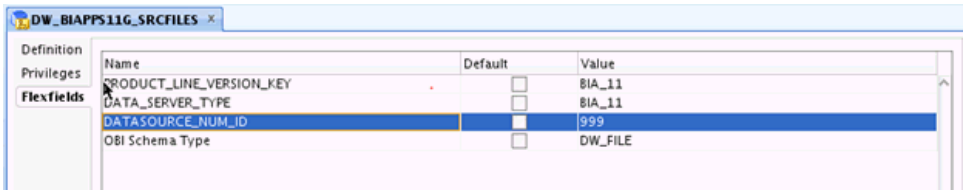
   - `DW_BIAPPS11G_LOG_FILES`



- DW_BIAPPS11G_SHARED_FILES

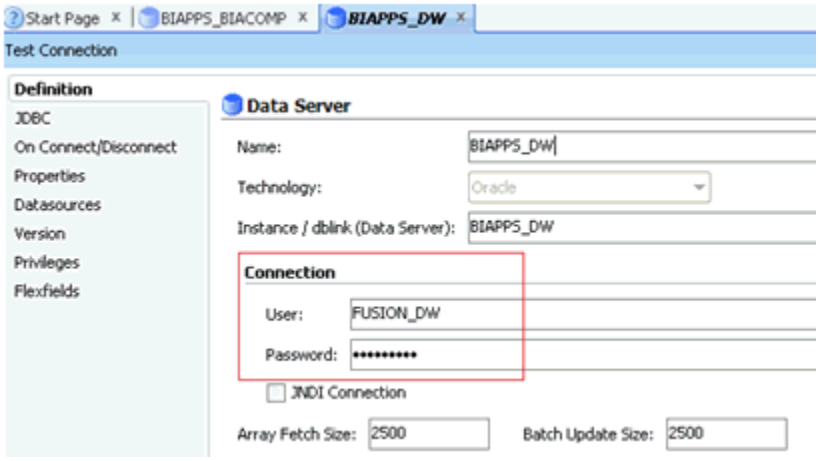


- DW_BIAPPS11G_SRCFILES

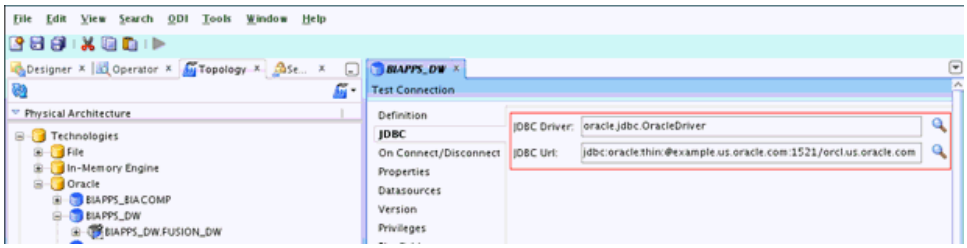


If you do not see 999 values for all these logical schemas, then set it with 999 values.

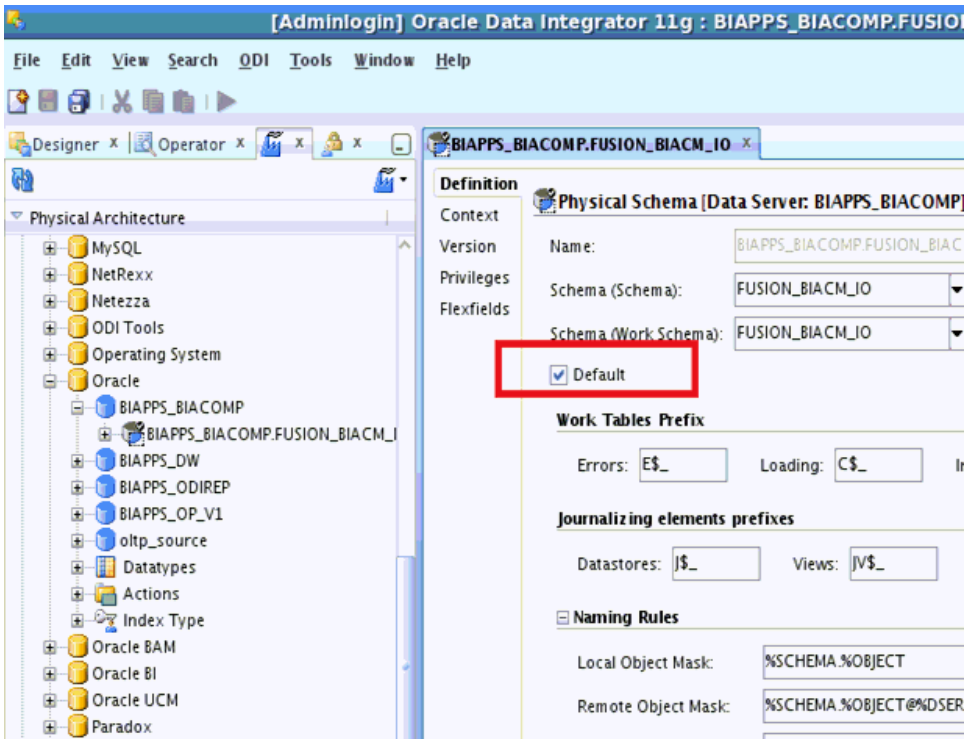
7. In ODI Studio, click **Topology** and select **Physical Architecture**. Open the BIAPPS_DW physical server.
8. Verify that the **User** and **Password** is correctly populated under the Definition tab.



9. On 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.



10. Repeat steps 1-4 for the `BIAPPS_BIACOMP` physical server.
11. Verify that the Physical schema for `BIACOMP` and `DW` are set as defaults. If they are not set as defaults, then the load plans will fail.
    a. In ODI Studio, click **Topology** and select **Physical Architecture**.
    b. Open the physical schema under the `BIAPPS_BIACOMP` physical server.



    c. Verify that the **Default** check box is selected on the Definition tab.
    d. Select the **Default** check box if it is not checked. Save changes.
12. Repeat steps 2 to 4 for the physical schema under the `BIAPPS_DW` physical server.

A

Repository Creation Utility Screens

These options are available when you run the Repository Creation Utility (RCU).

Welcome Page for RCU

This is the first screen that appears when RCU is started. Note the navigation pane on the left that summarizes the tasks that RCU will help you complete.

Each item in the navigation pane represents a specific screen that will prompt you for information required to create or drop your schemas. Click **Skip This Page Next Time** if you do not want to see the Welcome screen the next time you start RCU.

Create Repository

Use this screen to select the action you want to perform.

Action	Description
Create	Select this option to create component schemas in the database.
Drop	Select this option to remove component schemas from the database.

Database Connection Details

Use this screen to specify the connection credentials to the database in which you will be creating or dropping your schemas.

Select one of these procedures depending on your database:

- Specifying Connection Credentials for Oracle Databases and Oracle Databases Enabled for Edition-Based Redefinition
- Specifying Connection Credentials for Oracle MySQL Databases
- Specifying Connection Credentials for Microsoft SQL Server Databases

- Specifying Connection Credentials for IBM DB2 Databases

Click **Next** when you are finished entering the connection credentials for your database. A screen indicating the progress of the installer establishing the connection with the specified database will appear. If an error occurs while the connection is being established, the error message(s) appear in the Messages field on the Database Connection Details screen.

Specific database requirements for the various schemas can be found in Oracle Fusion Middleware System Requirements and Specifications on Oracle Technology Network.

For certified database versions for Oracle Fusion Middleware 11gR1, see Oracle Fusion Middleware Supported System Configurations on Oracle Technology Network.

> **Note:**
>
> If you are running the RCU for Oracle Business Analytics Applications Suite, then see Creating Schemas Using Business Analytics Applications Suite RCU for information about this screen.

Specifying Connection Credentials for Oracle Databases and Oracle Databases Enabled for Edition-Based Redefinition

For Oracle databases and Oracle databases enabled for edition-based redefinition, specify these connection credentials.

Field	Description
Host Name	Enter the name of the server where your database is running. Use this format: `examplehost.exampledomain.com` For Oracle RAC databases, specify the VIP name or one of the node names in this field.
Port	Enter the port number for your database. The default port number for Oracle databases is 1521.
Service Name	Specify the service name for the database. Typically, the service name is the same as the global database name. If you are unsure what the service name for your database is, you can obtain it from the `SERVICE_NAMES` parameter in the database's initialization parameter file. If the initialization parameter file does not contain the `SERVICE_NAMES` parameter, then the service name is the same as the global database name, which is specified in the `DB_NAME` and `DB_DOMAIN` parameters. For Oracle RAC databases, specify the service name of one of the nodes in this field. For example: `examplehost.exampledomain.com`
Username	Enter the user name for your database. The default user name is `SYS`.
Password	Enter the password for your database user.

Field	Description
Role	Select the database user's role from the drop-down list: • Normal • SYSDBA All schemas installed on an Oracle database require the SYSDBA role. If you are creating schemas for Oracle Internet Directory (OID), then you must use the user SYS and the SYSDBA role. See RCU Requirements for Oracle Databases on Oracle Technoogy Network.

Specifying Connection Credentials for Oracle MySQL Databases

For MySQL databases, specify these connection credentials.

Field	Description
Host Name	Enter the host name, IP address, or complete server name in host \server format of the server where your database is running. For Oracle RAC databases, specify the VIP name or one of the node names in this field.
Port	Enter the port number for your database.
Database Name	Specify the name of your database.
Username	Specify the name of a user with DBA or SYSDBA privileges.
Password	Enter the password for your database user.

Specifying Connection Credentials for Microsoft SQL Server Databases

For Microsoft SQL Server databases, specify these connection credentials.

Field	Description
Unicode Support	Select **Yes** or **No** from the drop-down list. Oracle SOA Infrastructure schemas are created with Unicode support (database tables created with NVARCHAR) only, regardless of the option selected in this field.
Server Name	Enter the host name, IP address, or complete server name in host \server format of the server where your database is running.
Port	Enter the port number for your database.
Database Name	Specify the name of your database.
Username	Enter the user name for your database. The user must have SYSDBA or DBA privileges.
Password	Enter the password for your database user.

Specifying Connection Credentials for IBM DB2 Databases

For IBM DB2 databases, specify these connection credentials.

Field	Description
Server Name	Enter the host name, IP address, or complete server name in host \server format of the server where your database is running.
Port	Enter the port number for your database.
Database Name	Specify the name of your database.
Username	Specify the name of a user with DB Owner privileges. The default user name for IBM DB2 databases is `db2admin`.
Password	Enter the password for your database user.

Select Components

Use this screen to select the component schemas you want to create or drop.

Topics:

- Creating Database Users for IBM DB2 Databases
- Creating Prefixes
- Selecting Components and Dependencies
- Specifying Custom Schema Names
- Checking Schema Prerequisites

  If you are creating schemas, you must remember the prefix and schema names for the components you are installing; you will need this information during the configuration phase of Oracle Fusion Middleware product installation. Oracle recommends that you write these values down.
- Dropping Schemas

If you are running the RCU for Oracle Business Analytics Applications Suite, then see Creating Schemas Using Business Analytics Applications Suite RCU for information about this screen.

Database Users for IBM DB2 Databases

IBM DB2 authenticates its database users using equivalent operating system users. Therefore, prior to running RCU, one operating system user must be created for each schema.

The operating system user name must match the schema owner name and must contain only lowercase letters; no all-uppercase or mixed-case names are allowed. For example, if you create a schema named `DEV_ODI` using RCU, then the operating system user must be named `dev_odi` (all lowercase letters).

Creating Prefixes

Prefixes are used to create logical groupings of schemas in a database.

For example, if you want to create two versions of the `MDS` schema in the database, you can use different prefixes to uniquely identify each one (for example, `TEST_MDS` and `PROD_MDS`). Note that the prefix name and schema name are separated by an underscore (_) character.

> **Note:**
>
> The Oracle Internet Directory (ODS) component cannot be prepended with a custom prefix; there can only be one repository for this component per database.

If you want to create a new prefix for your schemas, select **Create a New Prefix** and specify a new prefix name in the field. The prefix name must be a minimum of one character in length and cannot exceed 12 alphanumeric characters (0-9, a-z, or A-Z) in length (not including the underscore character). Prefixes should not start with a number. No whitespace or special characters are allowed.

> **Note:**
>
> For IBM DB2 databases, prefixes are limited to four characters in length (not including the underscore character).

The default new prefix is `DEV`. If `DEV` already exists as a prefix, then `DEV1` is used; if `DEV1` exists, then `DEV2` is the default, and so on.

Use existing prefixes to add additional components to an existing repository in the database. To use an existing prefix, select **Select an Existing Prefix** and choose a prefix from the drop-down list.

Selecting Components and Dependencies

When you select a component, any other components that may be required by the component you select are also selected. For example, if you select SOA and BPM Infrastructure, then all schemas in this category are selected along with the Metadata Services schema. The Metadata Services schema is required by each component in SOA and BPM Infrastructure.

If a component has a plus sign (+) next to its name, then there are sub components available. Click on the plus sign (+) to expand the category to view all sub components. If you want to select a component with all its subcomponents, click on the top-most box with the plus sign (+).

Custom Schema Names

Click on the name of any schema in the "Schema Owner" column to change the name of the schema.

Schema names can only contain alphanumeric characters (0-9, a-z, or A-Z) and are case-sensitive.

> **Note:**
>
> The Oracle Internet Directory (ODS) component cannot be prepended with a custom prefix; there can only be one repository for this component per database.

Checking Schema Prerequisites

You can check schema prerequisites from the Select Components screen.

Click **Next** when you are finished specifying your prefix, schema names, and selecting components. A screen indicating the progress of component prerequisite checking appears. If an error occurs during the prerequisite checking, the error message(s) appear in the Messages field on the Select Components screen.

Dropping Schemas

You can remove schemas from the database.

1. Select the prefix associated with the schema(s) you want to drop.
2. Select the component(s) whose schemas you want to drop.

Schema Passwords

Use this screen to specify the password for your schemas.

There are three ways to specify schema passwords; they are described in this table:

Option	Description
Use same password for all schemas	Select this option if you want to use a single password for all schemas and their auxiliary schemas. In the Password field, enter your password. Enter your password again in the Confirm Password field.
Use main schema passwords for auxiliary schemas	Select this option if you want to specify different passwords for the main schemas, but still have the same password used for their respective auxiliary schemas. If you select this option, only the main schemas will be visible in the table. For each schema, you must enter each schema's password in the Password column in the table, and enter the same password in the Confirm Password column.
Specify different passwords for all schemas	Select this option if you want to specify unique passwords for the main schemas and auxiliary schemas. If you select this option, all main schemas and auxiliary schemas will be visible in the table. For each schema and auxiliary schema, you must enter the password in the Password column in the table, and enter the same password in the Confirm Password column.

> **Note:**
>
> You must remember the passwords you enter on this screen; you will need this information during the configuration phase of Oracle Fusion Middleware product installation. Oracle recommends that you write these values down.

Custom Variables

Use this screen to specify additional configuration information required by the components during runtime.

This screen only appears if you selected a component on the Select Components screen that supports custom variables:

- Specifying Custom Variables for Oracle Business Intelligence Applications
- Specifying Custom Variables for Master and Work Repository (ODI)
- Specifying Custom Variables for Oracle WebCenter Portal's Activity Graph and Analytics

Custom Variables for Oracle Business Intelligence Applications

The RCU uses .dmp files to create the required schemas. Before you perform the action in this screen, you must copy the .dmp files for each schema to a directory with global write access on the appropriate database server host.

(RCU writes log files to this directory). The .dmp files are located in `BIA_RCU_HOME\rcu\integration\biapps\schema`.

In the Value field in the Custom Variables screen, for each schema enter the directory path of the folder that contains the .dmp file.

Do not include the name of the .dmp file in the directory path.

Custom Variables for Master and Work Repository (ODI)

Specify this information for the Master and Work Repository Custom Variables.

Variable	Description
Master Repository ID	A specific ID for the new Master Repository. Master Repository ID values must be between 0 and 999. Default value is 001.
Supervisor PAssword	Password of the supervisor user. You must confirm this password on the following line.

Variable	Description
Work Repository Type	Specify how the Work Repository will be used: • Use **Development (D)** for creating a development repository. This type of repository allows management of design-time objects such as data models and projects (including interfaces, procedures, etc.) A development repository also includes the run-time objects (scenarios and sessions). This type of repository is suitable for development environments. • Use **Execution (E)** for creating an execution repository: This type of repository only includes run-time objects (scenarios, schedules and sessions). It allows launching and monitoring of data integration jobs in Operator Navigator. Such a repository cannot contain any design-time artifacts. Designer Navigator cannot be used with it. An execution repository is suitable for production environments.
Work Repository ID	A specific ID for the new Work Repository. Default value is 001.
Work Repository Name	A unique name for the Work Repository (for example: DEVWORKREP1).
Work Repository Password	(Optional) - Provide a password for the Work Repository. If you provide a password, you must confirm the password on the following line.

Custom Variables for Oracle WebCenter Portal's Activity Graph and Analytics

You can specify custom variables for Oracle WebCenter Portal's Activity Graph and Analytics.

Specify **Y** if you want to install Activity Graph and Analytics with database partitioning enabled, or **N** if you do not want to enable database partitioning.

Map Tablespaces

Use this screen to specify your tablespace mapping information.

This screen only appears if you selected the **Create** option on the Create Repository screen.

Topics:

- Default Tablespace Mappings
- Changing Default and Temporary Tablespaces
- Viewing and Changing Additional Tablespaces
- Managing Tablespaces and Datafiles

Click **Next** when you are finished with your tablespace information. A screen will appear asking you to confirm the creation of tablespaces for any new schemas.

> **Note:**
>
> RCU only creates tablespaces for those components associated with RCU.

After you click **OK** to continue, a screen indicating the progress of the tablespace creation will appear.

Default Tablespace Mappings

In the Default Tablespace and Temp tablespace columns, you can click on the tablespace cell to select from a list of available additional tablespace names.

The default tablespace mapping for each component is shown in the Repository Creation Utility Schemas, IDs, and Tablespaces topic in the *Creating Schemas with the Repository Creation Utility*.

> **Note:**
>
> OID tablespace names cannot be user specified.

Changing Default and Temporary Tablespaces

You can have your components use as many or as few tablespaces as desired to suit your configuration.

To change the default tablespace for a component, select the tablespace name in the Default Tablespace column, then select the tablespace name you want to use from the drop-down list.

To change the temporary tablespace for a component, select the tablespace name in the Temp Tablespace column, then select the tablespace name you want to use from the drop-down list.

Viewing and Changing Additional Tablespaces

Some components have additional tablespaces associated with their schemas, which you can view or change for a component.

If this is the case, the **Additional Tablespaces** button appears on this screen. If none of the selected components have additional tablespaces, then this button does not appear.

To view additional tablespaces associated with the selected components, click the **Additional Tablespaces** button.

To change the tablespace you want to use for a component, click in the Tablespace Name column and select the tablespace you want to use from the drop-down list.

Managing Tablespaces and Datafiles

To manage your tablespaces and datafiles, click the **Manage Tablespaces** button.

Topics:

- Adding, Modifying, and Removing Tablespaces
- Adding, Modifying, and Removing Datafiles

Managing Tablespaces

Only tablespaces that will be created by RCU can be modified or removed. Tablespaces that existed before RCU was launched are visible on this screen but are grayed out and cannot be modified or removed.

Only tablespaces that are used by a component are created. You can specify a new tablespace here, but unless it is actually used by a component it will not be created.

To modify a tablespace, select the tablespace name on the left-hand portion of the screen, and edit the fields as described in this table:

Field	Description
Name	Edit the tablespace name this field to change the name of your tablespace.
Type	Specify whether you want this tablespace to be a temporary tablespace or permanent tablespace.
Block Size (KB)	Specify the block size (in Kilobytes) to be used for data retrieval.
Storage Type	Select **Use Bigfile Tablespace** if you want to create a bigfile tablespace; this is typically used if you have single large files instead of multiple small files. Select **Use Automatic Segment Space Management** if you want to use bitmaps to manage the free space within segments.

To add a tablespace, click **Add** and specify the same details as in the table (for modifying a tablespace) for your new tablespace.

To remove a tablespace, select the tablespace name from the navigation tree, then click **Remove**. This tablespace will not get created.

Managing Datafiles

In the Datafiles section, specify the datafiles that make up the selected tablespace.

Select one of these procedures for more information:

- Adding a Datafile
- Modifying a Datafile
- Deleting a Datafile

Add Datafile Dialog

To add a datafile, click the icon with the plus sign (+).

The Add Datafile screen appears.

Field	Description
File Name	Specify the name of the datafile. **Note:** Datafile names must be less than 30 characters in length, and names with a dash or hyphen (-) character are not permitted.
File Directory	Specify the location where this datafile will reside.
Size	Specify the initial size of the datafile. Use the drop-down list to specify the size in kilobytes (KB), megabytes (MB), or gigabytes (GB).
Automatically extend datafile when full (AUTOEXTEND)	Select **Automatically extend datafile when full (AUTOEXTEND)** if you want to automatically extend the size of your datafile when it becomes full. In the "Increment" field, specify the size by which your datafile should be increased each time it becomes full. Use the drop-down list to specify the size in kilobytes (KB), megabytes (MB), or gigabytes (GB). If you want to limit maximum size of the datafile, specify this value in the Maximum Size field.

Modifying a Datafile

You can edit a datafile.

To modify or edit a datafile, select the icon next to the datafile name you want to edit, then click the icon with the pencil.

The Edit Datafile screen appears.

Provide the information described in this table:

Field	Description
File Name	Specify the name of the datafile. Datafile names must be less than 30 characters in length, and names with a dash or hyphen (-) character are not permitted.
File Directory	Specify the location where this datafile resides.
Size	Specify the initial size of the datafile. Use the drop-down list to specify the size in kilobytes (KB), megabytes (MB), or gigabytes (GB).

Field	Description
Automatically extend datafile when full (AUTOEXTEND)	Select **Automatically extend datafile when full (AUTOEXTEND)** if you want to automatically extend the size of your datafile when it becomes full. In the Increment field, specify the size by which your datafile should be increased each time it becomes full. Use the drop-down list to specify the size in kilobytes (KB), megabytes (MB), or gigabytes (GB). If you want to limit maximum size of the datafile, specify this value in the "Maximum Size" field.

Deleting a Datafile

You can delete a datafile.

To delete a datafile, select the icon next to the datafile name you want to delete, then click the icon with the "X".

Summary of Schema Creation or Removal

This screen provides a summary of the actions that are about to be performed.

Review the information on this screen, and click **Create** to begin schema creation, or **Drop** to begin schema removal.

A screen will appear indicating the progress of the actions being performed.

Completion Summary

This screen provides a summary of the actions that were performed.

The log file names for each component that are visible in the Logfile column. The main RCU log and component log files are written to this directory on UNIX operating systems:

`RCU_HOME/rcu/log/logdir.`*`date_timestamp`*

On Windows operating systems:

`RCU_HOME\rcu\log\logdir.`*`date_timestamp`*

If there were any problems encountered during schema creation, you can troubleshoot the issue using the log files.

If errors are encountered during a Create operation, or if a Create operation fails for any component, the **Cleanup for failed components** checkbox appears on this page and is selected by default. If selected, RCU will perform cleanup operations for the component that failed during the Create operation. If you choose not to select this checkbox, you can cleanup the failed component at a later time by performing a Drop operation for the failed component(s).

B

Installer Screens Common to All Oracle Fusion Middleware Suites

These installation screens are common to all the Oracle Fusion Middleware product installers.
Topics:

Specify Inventory Location

If this is your first Oracle installation on a host that is running UNIX or Linux system software, you must use this screen to specify the location of the Oracle inventory directory.

The inventory directory is used by the installer to keep track of all Oracle products installed on the computer.

Field	Description
Inventory Directory	Use this field to identify the complete path for the new Oracle inventory directory that will be created. By default, the installer assumes you will create the Oracle inventory in a directory, based on the following environment variable and path: `$USER_HOME/oraInventory` If this location is not appropriate for your environment, enter a new path for the location of the inventory directory. Note that the inventory directory will eventually contain many files, including log files for each Oracle software installation you perform on this system.

Field	Description
Operating System Group Name	From the Operating System Group drop-down menu, select the group whose members you want to grant access to the inventory directory; all members of this group will be able to install products on this system.

Inventory Location Confirmation

This dialog box appears only on UNIX systems. It prompts you to run a shell script that will create the Oracle inventory in the location you specified on the Inventory Location screen.

You must have root privileges to run the script.

If you do not have root privileges, but you want to continue with the installation, select **Continue Installation with Local Inventory**.

The preferred method of managing your Oracle installations is to create a central inventory directory with the shell script. If you create a central inventory directory, then the next time you install any Oracle software on this system, the installer will automatically locate and update the inventory without prompting you. The installer uses the inventory to identify what Oracle software is installed. It also saves all your installation log files to the inventory location.

If you do not run the script and use a local inventory, a local copy of the inventory is created for this specific installation only. If you later run the installer to install additional Oracle software, the installer will again prompt you to create an inventory.

Welcome Page for the Oracle Fusion Middleware Installer

This page introduces you to the Oracle Fusion Middleware installer and provides two important pieces of information.

- A navigation pane on the left that summarizes the tasks the installer will help you complete. Each item in the navigation pane represents a specific installer screen that will prompt you for information required to install the software.
- Information about any prerequisites you might need to perform before continuing with the installation.

Review the information on this screen carefully to be sure you have performed all the necessary prerequisites.

If you are not sure about any of the prerequisite tasks, refer to the *Planning an Installation of Oracle Fusion Middleware*, as well as the documentation for the specific Oracle Fusion Middleware software you are about to install.

Prerequisite Checks

This screen analyzes the host computer to ensure that specific operating system prerequisites have been met.

If any of the prerequisite checks fail, then a short error message appears in the bottom portion of the screen. Fix the error and click **Retry** to try again. If you want to ignore the error or warning messages and continue with the installation, click **Continue**.

Click **Abort** to stop prerequisite checking for all components.

More About System Requirements and Prerequisites

Note that before performing any installation you should read the system requirements and certification documentation to ensure that your environment meets the minimum installation requirements for the products you are installing. Both of these documents are available on Oracle Technology Network (OTN).

The system requirements document covers information such as hardware and software requirements, minimum disk space and memory requirements, and required system libraries, packages, or patches. See Oracle Fusion Middleware System Requirements and Specifications.

The certification document covers supported installation types, platforms, operating systems, databases, JDKs, and third-party products. See Oracle Fusion Middleware Supported System Configurations

About 32-Bit and 64-Bit Installers

Some Oracle Fusion Middleware products provide separate installers for 64-bit and 32-bit operating systems. For those products, ensure that you use the appropriate installer for the operating system you are using. See Oracle Fusion Middleware System Requirements and Specifications.

Security Updates

Use this screen to enter your My Oracle Support account information so you can receive the latest product information and security updates via your My Oracle Support account.

If you do not want to register for security updates or if you do not have a My Oracle Support account, then leave all the fields on this screen empty. Click **Yes** to confirm your selection.

Element	Description
Email	Enter the email address you used to register with My Oracle support.
I wish to receive security updates via My Oracle Support	Select this option to indicate that you have a My Oracle Support account and that you want to receive updates via My Oracle Support.
My Oracle Support Password	Enter the password for your My Oracle Support account.

Software Updates

Use this screen to quickly and easily search for the latest software updates, including important security updates, via your My Oracle Support account.

Element	Description
Skip Software Updates	Select this option to skip this screen. The installer will not check for updates that might be applicable to the current product installation.
Search My Oracle Support for Updates	If you have a My Oracle Support account, then select this option to have the installer automatically search My Oracle Support for software updates that apply to the software products are about to install. Enter your My Oracle Support account name and password, and then click **Search for Updates**. The installer automatically downloads applicable software updates from My Oracle Support. Before you search for update, you can test your login credentials and the connection to My Oracle Support by clicking **Test Connection**. Click **Proxy Settings** to configure a proxy server if one is required.
Search Local Directory for Updates	Select this option if you already downloaded the latest software updates and you want the installer to search a local directory for updates applicable to the products you are about to install. When you select this option, the installer displays an additional field and **Browse** button that you can use to identify the local directory where your updates are located.

Installation Location

Use this screen to identify where you want to install your Oracle Fusion Middleware software.

Important:

- Depending upon the type of installation you are performing one or more of the fields shown here might not appear on this screen. Each Oracle Fusion Middleware component has different requirements for determining where the software is installed.
- If you are installing a Patch Set, then you must specify an existing Middleware home that contains the Oracle home that will be patched.
- If you are performing an installation on a Windows operating system, be sure that your directory paths are valid and do not contain double backslashes (\\).

Field	Description
Oracle Middleware Home Location	Use this field to specify the location of your Oracle Middleware home directory. • If you are using Oracle WebLogic Server as your application server: In the Oracle Middleware Home field, specify the absolute path to your existing Oracle Middleware home directory; this is the directory that was created when you installed Oracle WebLogic Server. If you do not know the full path to your Middleware home, you can click **Browse** to select an existing directory in your system. • If you are using IBM WebSphere as your application server: In the Oracle Middleware Home field, specify the absolute path to the directory you want to use as the Middleware home. This directory has no relation to the location of your WebSphere installation. If you specify a directory location that does not already exist, the installer will create the directory for you.
Oracle Home Directory	The Oracle home directory is where your products will be installed. All software binaries will reside in this directory, and no runtime process can write to this directory. Specify the directory inside the Oracle Middleware home where you want to install your products, but note these items: • If you specify a new directory, it will be created inside the Middleware home. • If you specify a directory that already exists (for example, you are reinstalling due of an incomplete previous installation), then it must be inside the Oracle Middleware home. • If you are using the Oracle Fusion Middleware Application Developer installer, then all the binaries are installed into the Oracle Common home. • If you are using a Patch Set installer, the installer will verify that the Oracle home you selected is compatible with the patch set installer you have selected. For example, you cannot patch an Oracle Identity Management Oracle home with the Oracle SOA Suite patch set installer.
WebLogic Server Location	The directory name for your WebLogic Server home. This directory will automatically be created inside the Middleware home. The default name for this directory is "wlserver_" followed by the version number. For example, `wlserver_10.3`.
Oracle Instance Location	Enter the absolute path to the location where you want to create the Oracle Instance directory. The installer creates the Oracle Instance directory using the location you enter in this field and using the name you enter in the Oracle Instance Name field. Do not enter a path to an existing directory that contains files—if you enter a path to an existing directory, that directory must be empty. The installer installs the component's configuration files and runtime processes in the Oracle Instance directory. Runtime components will write only to this directory. You can identify any location on your system for the Oracle Instance directory—it does not have to reside inside the Oracle Middleware Home directory.

Field	Description
Oracle Instance Name	Enter a name for the Oracle Instance directory. The installer uses the name you enter in this field to create the Oracle Instance directory at the location you specify in the Oracle Instance Location field. This directory is commonly referred to as ORACLE_INSTANCE. Instance names are important because Oracle Fusion Middleware uses them to uniquely identify instances. If you install multiple Oracle Fusion Middleware instances on the same computer, for example, an Oracle Identity Management instance and an Oracle WebLogic Server instance, you must give them different names. The name you enter for the Oracle Instance directory must: • Contain only alphanumeric and underscore (_) characters • Begin with an alphabetic character (a-z or A-Z) • Consist of 4-30 characters • Not contain the host name or IP address of the computer
Location	If you are installing the Oracle Discoverer Desktop or Oracle Discoverer Admin applications, use this field to enter the location where the applications will be installed. Enter the absolute path for the Oracle Home location. This is the directory where the software binaries will reside; no runtime processes may write to this directory. The specified directory must be an empty directory or an existing Oracle Home location.

Application Server Screen

Use this screen to select the application server you want to use for this installation.

- If the installer detects a Middleware home with Oracle WebLogic Server installed, then this is the application server that will be used. All other fields in this screen will be inactive.
- If the installer detects a Middleware home without an Oracle WebLogic Server installed, you must select one of the application server options and then provide its location in the Application Server Location field.
- If the installer does not detect a Middleware home directory, the **WebLogic Server** option will be inactive. You must select **WebSphere** and then provide the location of your IBM WebSphere in the Application Server Location field.

Summary of Installation and Configuration Options

This screen summarizes the selections you have made during the installation or configuration session.

Some Oracle Fusion Middleware installers allow you to install and configure the products as part of the installation process. As a result, the installation summary page is sometimes referred to as the configuration summary page.

In either case, this screen provides this information:

- The location of your installation
- How much disk space will be used for the installation

- The applications you have selected for installation

Review the information on this screen to verify the options you have selected before the installation or configuration begins.

If you want to make any changes to the configuration before starting the installation or configuration, use the navigation pane to select the installer screen you want to return to and edit.

If you want to save this installation or configuration to a text file (called a response file), click **Save**. The resulting response file can be used later if you choose to perform the same installation from the command line. See the section on Silent Installation in your component-specific for more information.

Installation Progress

This screen shows you the progress of the installation.

If you want to quit before the installation is completed, click **Cancel**. Doing so will result in a partial installation; the portion of the software that was installed on your system before you canceled the installation will remain on your system, and you will have to remove it manually.

Configuration Progress

This screen shows you the progress of your software configuration.

This screen is divided into these main parts:

- The navigation pane on the left, which shows you where you are in the overall installation and configuration process.
- A list of configuration tools that can be expanded and collapsed to show either the overall progress of the configuration or a more detailed listing of the progress of each configuration tool.
- A set of control buttons (Abort, Retry, and Continue), which you can use in the event of a configuration tool failure.
- The name and location of the configuration log file.
- A summary of the results for each configuration tool, which includes any error messages generated by the failure of a configuration tool.

If an error occurs while any of the configuration tools are running, the installer identifies the configuration tool, stops, and alerts you of the problem. To help resolve the problem, you can:

- Expand the list in the results section of the page, so you can see the error message that was generated.
- Leave the installer running and use another terminal window to review the configuration log file.
- If possible, address the problem and use the control buttons to determine your next action, as described in this table.

Element	Description
Abort	Click this button to abort the installation and configuration of the Oracle Fusion Middleware software. This action closes the installer.
Retry	Click this button to retry the failed configuration tool. If you were able to identify and address the error, then use this button to try the configuration tool again.
Continue	Click this button to ignore the error and continue with the rest of the configuration tools. This is the equivalent of skipping the configuration tool that generated the error.

Complete

This screen summarizes the installation that was just completed.

If you want to save this summary information to a text file for future reference, click **Save**.

For some Oracle Fusion Middleware installers, you can also save the configuration information to a text file.

Click **Finish** to dismiss the screen and end your installation session.

C

Oracle BI Applications Installation and Configuration Screens

These options are available when you are installing and configuring Oracle Business Intelligence Applications (Oracle BI Applications).
Topics:

Welcome Page for Business Analytics Applications Suite Installer

This screen introduces you to the Oracle Business Analytics Applications Suite installer.

The navigation pane on the left summarizes the tasks the installer will help you complete. Each item in the navigation pane represents a specific installer screen that will prompt you for information required to install the software.

Before you run the Business Analytics Applications Suite installer, you must complete these prerequisites:

- Install Oracle BI Enterprise Edition 11*g*
- Install Oracle Data Integrator (ODI)

To install the prerequisites for Business Analytics Applications Suite installer, see Installation Prerequisites for Oracle BI Applications.

Specify Installation Location for Business Analytics Applications Suite Installer

Use this screen to specify where the Oracle Fusion Middleware home is installed.

Field	Description
Oracle Middleware Home	Specify the path to the directory for an existing Oracle Middleware home where Oracle BI EE has been installed. If you do not know the location of the directory, click **Browse** to locate the directory on your system.
Oracle Home Directory	Specify the Oracle home for BI, for example, Oracle_BI1. Do not specify any other Oracle home or choose to create a new one. The Oracle home for Business Intelligence directory is where the software binary files for Oracle BI Applications will be installed.

> **Note:**
>
> If you are installing on a Microsoft Windows operating system, ensure that the directory paths are valid and do not contain double backslashes (\\).

Welcome Page for the configApps File

This screen introduces you to the Oracle Business Analytics Applications Suite configuration process.

Before you run the `configApps.bat/sh` file, you must complete these prerequisites:

- Run the Business Analytics Applications Suite installer. See Installing Oracle BI Applications Using the Business Analytics Applications Suite Installer

  .
- Apply Oracle Fusion Middleware platform patches. See Applying the Oracle Fusion Middleware Platform Patch.

  Do not proceed with the configuration unless you have applied the platform patches. If you have not applied the patches, exit the configuration utility and apply the patches. Then, re-run the `configApps.bat/sh` file.

Extend BI Domain

Use this screen to specify details for the WebLogic Administration Server domain.

Field	Description
Host Name	The host name of the computer on which the WebLogic Administration Server domain exists. This field is read-only.
Port	Specify the port number over which the WebLogic Administration Server domain communicates. The default is 7001.

Field	Description
User Name	Specify the user name for logging into the WebLogic Administration Server.
User Password	Specify the password for logging into the WebLogic Administration Server.

Specify Installation Location for configApps

Use this information when indicating the installation locations when running the `configApps.bat` or `configApps.sh` file.

Field	Description
Middleware Home	The path to the directory for an existing Oracle Middleware Home where Oracle BI EE has been installed. The value in this field is read-only.
Oracle Home	The Oracle home for BI, which is the location where Oracle BI EE, and Oracle BI Applications files are installed. The value in this field is read-only.
WebLogic Server Home	The directory name for the WebLogic Server. The installer automatically creates this directory inside the Oracle Middleware home. The default name for this directory is "wlserver_" followed by the version number. For example, wlserver_10.3. The value in this field is read-only and is the host name you specified in the Middleware Home field.
Domain Home	The home directory for the domain associated with the Oracle Business Intelligence system. The value in this field is read-only.
Instance Home	The path to the Oracle Instance directory. The installer installs component configuration files and runtime processes in the Oracle Instance directory. Runtime components write to this directory only. The directory that you identify for the Oracle Instance can be located anywhere on your system, and does not need to be inside the Oracle Middleware home. The value in this field is read-only.
Instance Name	The name of the Oracle Business Intelligence instance. By default, the location is based on the value in the Instance Home field. This directory is commonly referred to as ORACLE_INSTANCE. The value in this field is read-only.

Note:

If you are installing on a Microsoft Windows operating system, ensure that the directory paths are valid and do not contain double backslashes (\\).

Configure Components

Use this screen to select the components that you need to configure.

To deploy Oracle BI Applications, select **BI Application Components**.

Repository Encryption Password

Use this screen to specify the password used to encrypt the Oracle BI Applications repository.

Field	Description
RPD Password	Specify the password used to encrypt the repository.
Confirm RPD Password	Confirm the password used to encrypt the repository.

Oracle BI Applications Administrator User

Use this screen to specify the Oracle BI Applications Administrator user details. This user will be created in the Oracle WebLogic Server embedded LDAP. Note the credentials you enter for this user. This user has full access to Oracle BI Applications Configuration Manager and to the ODI repository for Oracle BI Applications.

Field	Description
Username	Specify a username for the Oracle BI Applications Administrator.
Password	Specify a password for the Oracle BI Applications Administrator.
Confirm Password	Confirm the password.

MDS Schema

Use this screen to specify connection details for the MDS schema.

Field	Description
Database Type	The type of database that hosts the MDS schema. The only supported database type is **Oracle**.
Connect String	The connect string used to access the MDS schema.
MDS Schema Username	The schema name for the MDS schema.
MDS Schema Password	The password for the MDS schema.

Oracle BI Applications Components Repository Schema

Use this screen to specify connection details for the Oracle BI Applications Components Repository (BIACOMP).

Field	Description
Database Type	Select the type of database that hosts the Oracle BI Applications Components Repository (BIACOMP) schema. The only supported database type is **Oracle**.
Connect String	Specify the connect string used to access the Oracle BI Applications Components Repository (BIACOMP) schema. Use the format: `host:port:service_name`
BIA Components Repository Schema Username	Specify the schema name for the Oracle BI Applications Components Repository (BIACOMP) schema.
BIA Components Repository Schema Password	Specify the password for the Oracle BI Applications Components Repository (BIACOMP) schema.

Business Analytics Warehouse Schema

Use this screen to specify connection details for the Oracle Business Analytics Warehouse schema.

Field	Description
Database Type	Specify the type of database that hosts the Oracle Business Analytics Warehouse schema. The only supported database type is **Oracle**.
Connect String	Specify the connect string used to access the Oracle Business Analytics Warehouse schema. Use the format: `host:port:service_name`
Business Analytics Warehouse Schema Username	Specify the schema name for the Oracle Business Analytics Warehouse schema.
Business Analytics Warehouse Schema Password	Specify the password for the Oracle Business Analytics Warehouse schema.

Oracle BI Applications ODI Repository Schema

Use this screen to specify connection details for the Oracle BI Applications ODI Repository schema.

Field	Description
Database Type	Specify the type of database that hosts the ODI Repository schema. The only supported database type is **Oracle**.
Connect String	Specify the connect string used to access the ODI Repository schema. Use the format: `host:port:service_name`

Field	Description
ODI Repository Schema Username	Specify the schema name for the ODI Repository schema.
ODI Repository Schema Password	Specify the password for the ODI Repository schema.

Configure Ports

Use this screen to configure the ports for the Oracle Business Intelligence system.

Field	Description
Auto Port Configuration	Select this option if you want Oracle Business Analytics Applications Suite installer to configure the ports for you.
Specify Ports Using Configuration File	Select this option to use an existing configuration file to configure the ports. Optionally, click **Browse** to specify its location. Click **View/Edit File** to view or edit the file. The sample configuration file is named staticport.ini and is provided in the `Disk1\stage\Response` directory of the Business Analytics Applications Suite installer.

D

Generating DDL and Assigning Tablespaces to Tables and Indexes

These topics describe how to generate DDL to deploy Oracle Business Analytics Warehouse tables and how to assign tablespaces to tables and indexes.
Topics:

Overview of Oracle Business Analytics Warehouse Tables

The Oracle Business Analytics Warehouse tables are automatically deployed during the installation process when the Business Analytics Applications Suite Repository Creation Utility (RCU) executes a shipped DDL script.

The RCU does not prompt for which tablespace to assign to the individual tables and related indexes nor does it provide a mechanism for you to alter the shipped DDL. To introduce changes to the Oracle Business Analytics Warehouse data model, you use Oracle Data Integrator (ODI) to generate a new DDL script.

You may want to regenerate the Oracle Business Analytics Warehouse DDL for these reasons:

- You may want to modify the Oracle Business Analytics Warehouse, either by modifying existing tables or creating new ones.
- You may want to have separate development environments. In this case you must use ODI to generate the DDL to be executed in these environments to deploy the Oracle Business Analytics Warehouse tables rather than run the RCU for each environment.
- The default tablespace assigned to the Oracle Business Analytics Warehouse database user is used for all tables and indexes when those objects are created by the RCU. You may want to assign different tablespaces to the DW tables other than the default tablespace associated with the database user.
- If a patch or upgrade is applied that alters an ODI data store or introduces a new ODI data store, the corresponding database table must be altered or created.

You can make changes directly in the database but these changes must be synchronized with the ODI Repository. This is done by running the Reverse Knowledge Module (RKM) of Oracle BI Applications to bring in the changes into ODI. If this RKM is not run, ODI will not be aware of these changes, which can lead to problems when populating the affected warehouse table.

Generating the Oracle Business Analytics Warehouse DDL

Use this procedure to generate the Oracle Business Analytics Warehouse DDL.

Keep these items in mind when introducing changes in ODI:

- Full mode generates a script that creates all tables and sequences, regardless of what may already be deployed in the database. Incremental mode compares the ODI and database definition of the tables and columns. Neither mode creates, modifies or drops indexes.
- Add or modify columns:
  - Add column: ODI allows duplicate column names but you will get an error when deploying the DDL to the database.
  - Modify column:

    - Column renaming in ODI will be treated as a drop of the existing column and a new column will be added in the database. This means any existing data in that column is lost. The procedure works on column name. When generating the DDL, the procedure compares the database and ODI definitions of the columns. If a column has been renamed in ODI, that column will not be found in the database so it is added.

    - Changes to datatype, scale, precision, nullability are supported as ALTER statements

    - You should avoid altering preconfigured columns. They should introduce their own custom column if they need a change in functionality.

    - Existing columns can be changed to a larger size but should not be reduced to a smaller size. Similarly, column data types can be changed to one that already accommodates existing data (CHAR to VARCHAR, DATE to DATETIME) but should not be changed to less accommodating datatype (VARCHAR to NUMBER). ODI doesn't prevent users from making this kind of change but when deploying the DDL, users will likely encounter issues.
  - Delete column: You should not delete preconfigured columns. You should only delete custom columns. If a column is deleted from the ODI Repository, it will be dropped from the table using an ALTER statement. This is done by identifying those columns that exist in the database but do not exist in ODI. (Thus, renaming the column in ODI results in a drop and add statements being generated).
- Add or modify indexes:
  - Add index: ODI allows duplicate index names and duplicate index definitions, but you will get an error when deploying the DDL on the database.
  - Modify index:

    - Indexes are only dropped and created during the execution of a load plan. Indexes are not synchronized by this procedure.

    - Changes to preconfigured indexes is fully supported. Changes to uniqueness and active/inactive are supported. The primary use case is to make a preconfigured index active or inactive

    - Changes to preconfigured index names should be avoided. If a load plan previously executed and created the index, the index will continue to exist with

the old name in the database. Because ODI is not aware of this index, problems may occur during the execution of the load plan.

  - Delete index:

    - You should only delete custom indexes and not preconfigured indexes.

    - If you do not want a preconfigured index, you should inactivate it.

- Add or drop a table: You can add a new table or delete an existing table in OD.
  - If a table is added in ODI and does not exist in the database, it will be added using a CREATE TABLE statement.
  - If a table is deleted from ODI and still exists in the database, a DROP TABLE statement will be generated.
  - You should not delete preconfigured tables.
- Add or drop a sequence:

  You should add a sequence in ODI for new tables that includes the ROW_WID column and that follows the format <TABLE_NAME>_SEQ. You should add a sequence in ODI for new tables that includes the SCD1_WID column and that follows the <TABLE_NAME>_S1W naming convention.
  - If a sequence is added in ODI and does not exist in the database, it will be added using a CREATE SEQUENCE statement.
  - Sequences deleted from ODI are not dropped from the database.

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

   Specify this information:

Option	Description
CREATE_SCRIPT_FILE	If set to True, this will create a .sql file with the DDL script. This is useful to see what the changes are. If no value is provided for the SCRIPT_LOCATION option, the procedure will create a file in the `oracledi` directory named `biappsddl.sql`.
REFRESH_MODE	FULL or INCREMENTAL FULL will generate the DDL for the entire data warehouse using CREATE statements. The Table Mask option is ignored. INCREMENTAL will compare the ODI data stores with the tables in the database. This option should be used with the Table Mask option because this process can take a very long time comparing the entire data warehouse.
CHARCLAUSE	Provided for Unicode support. If set to True, the CHAR clause will be included in the DDL.
RUN_DDL	If set to True, the DDL will run against your warehouse.
SCRIPT_LOCATION	If you are creating a script, this field indicates the path where the script will be created.

Option	Description
TABLE_MASK	Default % will compare all tables. If you want to create DDL for a subset of tables only or just a single table, you can change this value. For instance, to create a diff script for dimension tables, you would set this value to W_%_D.

Oracle BI Applications Patches

Patching of Oracle BI Applications may require changes to database objects, such as modifying existing tables or introducing new tables. Oracle will provide a patch file that you will use to merge changes with the existing ODI Repository definition.

These changes must then be deployed to the database. New tables, columns and indexes that you introduced are retained. Any changes you made to preconfigured tables, columns, and indexes must go through a conflict resolution process.

Assigning Tablespaces

Using the Designer navigator in Oracle Studio, you can assign default tablespaces for the data warehouse tables, such as the W_%_D and W_%_F tables, their associated indexes, and the staging tables, such as the W_%_DS and W_%_FS tables. Indexes are not created by this utility but are created during the ETL process and will reflect the tablespace assigned in ODI.

To assign tablespaces to data warehouse tables:

1. Launch ODI Studio, and display the Designer navigator.
2. In the Models editor, expand Oracle BI Applications model.
3. Edit the Oracle BI Applications model and assign the OBI Tablespace flexfields with the tablespace values to be used for these objects.

   All data warehouse tables and indexes will use the tablespaces defined here.
4. (Optional) Individual tables can be overridden to use a different tablespace from those assigned at the model level.

   Edit the particular data store and assign the OBI Tablespace flexfield with the tablespace to be used for this table.
5. (Optional) To assign the tablespace for individual indexes, edit the constraint and assign the OBI Tablespace flexfield value to match the tablespace name to be used.

E

Integrating Interactive Dashboards and Siebel Operational Applications Data

Perform these required additional configuration steps to run an Oracle Business Intelligence Applications (Oracle BI Applications) with a Siebel CRM application.

After you have configured the Oracle BI Server and are able to access the dashboards, you must update the Siebel operational application to view Analytics dashboards from within the Siebel operational application. Completing the initialization in the Siebel operational application involves these processes:

Updating the Siebel Operational Application

Use this procedure to change the Siebel operational application host name to the host name of the system that runs Oracle Business Intelligence Presentation Services (Oracle BI Presentation Services).

1. Open your Siebel operational application.
2. Navigate to **View**, then **Site** Map.
3. Click **Integration Administration screen**.
4. Click **Host Administration view**.
5. Query for NQHOST in the Virtual Name column:
    - In Windows, change the host name from <*AnalyticsServerName*> to the host name of the system that runs Oracle BI Presentation Services.
    - In AIX or Solaris, change the host name from <*AnalyticsServerName*> to the name of the port.

      For example, `servername.siebel.com:8080`

> **Note:**
>
> For UNIX platforms only: You might need to add the domain name suffix to the server name in order to make sure that action links work on the Oracle Business Intelligence user interface.

6. Log out of the application and log back in.

Reapplying Customized Style Sheets

Because of these changes to styles, review your deployment's customizations manually, reapply them, and test them thoroughly to ensure that there are no problems.

For Oracle's Siebel Business Analytics versions 7.7 and later, new styles have been appended to these style sheets

- Go.css
- PortalBanner.css
- PortalContent.css
- Views.css

These new classes are identified in the style sheets. In this version of Oracle Business Intelligence, new styles and files must be added to the underlying style sheet (for example, to s_Siebel7). For complete functionality, any custom styles require similar updating. In addition, `views2.css` and some other files have been added to the `s_` directory. For custom column formatting to work properly, references to font sizes and families should also be removed from the TD Styles section in `PortalBanner.css`, `PortalContent.css`, and `Views.css`.

After you have tested them, but before you copy the default `views.css` files back to the implementation server, perform this task on the server to clear the server caches.

To clear the server caches and restore your default views:

1. Shut down Oracle BI Server, Oracle BI Presentation Services and IIS.
2. Remove your custom `views.css` from the directory where it has been installed.

   For example:

   ```
   $INSTALL\web\app\res\s_Siebel7\b_mozilla_4
   ```
   or

   ```
   $INSTALL\OracleBIData\Web.
   ```
3. Clear the Oracle BI Presentation Services Server Cache.

   In the `C:\WINNT\Temp` directory, delete the `nQs_*.temp` files.
4. Clear the Browser Cache.

   From the Internet Explorer menu, navigate to **Tools**, then **Internet Options** , then **Settings**, then **View Files**, and delete all the files in this directory.
5. Restore the default `views.css` files to the appropriate directory.
6. Restart the Analytics Server, Oracle BI Presentation Services and IIS.

How to Configure Oracle Business Intelligence with Oracle's Siebel Web Server Extension (SWSE)

Whenever you run Oracle Business Intelligence and Siebel Web Server Extension (SWSE) on separate systems, you must perform additional configuration steps in order for action links and interactive charts to work. If, for example, you plan to run the SWSE and Oracle BI Presentation Services on different Web servers, you must use some kind of networking or load balancing mechanism to create a single logical domain (or virtual IP address) for the two systems.

When one virtual IP address is created for two systems, the Web browser accesses one IP address and is still routed to different physical systems, based on the port accessed. From the browser, it appears that both servers are running on the same IP address.

You can use any of several physical methods to create a single logical domain, such as running SWSE and Oracle BI Presentation Services on a single system if you are not load balancing the SWSE, or using a router to do the mapping, or using load balancing software. Your company must determine the best mechanism to accomplish this routing given the topology being used.

Configuring Oracle Business Intelligence to work with Siebel Web Extension includes these tasks:

- Creating a Virtual IP Address for the SWSE and Oracle BI Presentation Services
- Testing the Virtual IP Configuration for Oracle Business Intelligence and the SWSE

Creating a Virtual IP Address for the SWSE and Oracle BI Presentation Services

You create a virtual IP address for the Siebel Web Server Extension (SWSE) and Oracle BI Presentation Services in order to make it appear that all servers are running on the same virtual system. The easiest way to do this is to configure Oracle BI Presentation Services to run on a different port (for example, port 84) from SWSE (which usually runs on port 80).

For example, SWSE is load-balanced across <*system1*>:port 80 and <*system2*>: port 80, and Oracle BI Presentation Services is running on <*system3*>:port 84, and the virtual address is defined as `http://siebel.company.com`. Therefore, the network or load-balancing software should be configured to route requests like http://siebel.company.com to <*system1*> and <*system2*>, and to route requests like `http://siebel.company.com:84 to <system3>`.
To create a virtual IP address for Siebel Web Engine and Oracle BI Presentation Services:

1. On the network, set up CSS to direct requests from <*virtual domain*> to <*physical Siebel Web Server Extension system*>*:*
    - Where the acronym CSS represents the load-balancer or router used to do the virtual IP configuration.

- Where <*virtual domain*> is the virtual IP prefix that users enter to navigate to the Siebel applications (in the preceding example, this is `http://siebel.company.com`).

2. On the network, set up CSS to direct requests from <*virtual domain*>:84 to <*physical Oracle BI Presentation Services system*>:84.
3. In the Siebel application, using the Siebel Administration screen, set the NQHost parameters for Oracle Business Intelligence Symbolic URLs to point to the <*virtual domain*>:84, instead of directly to the Oracle BI Presentation Services server physical system.

> **Note:**
>
> If you are running Oracle's Siebel Business Analytics 7.5.3 instead of version 7.7 or later, perform this next additional step.

4. In the Siebel application on the Oracle BI Presentation Services server, locate the registry setting `\SOFTWARE\Siebel Systems, Inc.\Siebel Analytics\Web\7.5\Charts`.
5. Add a new key, ForceFileBasedPainter, and enter TRUE into the Data string.

Testing the Virtual IP Configuration for Oracle Business Intelligence and the SWSE

Use a client browser to verify that Oracle Business Intelligence and SWSE work when accessed directly through a physical address.

For <*virtualdomain*>, substitute the Virtual IP address you created in Creating a Virtual IP Address for the SWSE and Oracle BI Presentation Services.

1. In a client browser, enter `<virtual domain>:84/analytics`.

   The Oracle Business Intelligence logon appears.
2. In a client browser, enter `<virtual domain>/callcenter` (or other Siebel application).

   The SWSE appears.
3. Navigate to an Analytics screen within the Siebel application to see if Oracle Business Intelligence appears.
4. Interact with Oracle Business Intelligence charts and action links.

About Configuring Oracle BI Action Links

You can find information for configuring action links in the Oracle Fusion Middleware documentation.

To configure and use Oracle BI action links, see Configuring the Action Framework in *Integrator's Guide for Oracle Business Intelligence Enterprise Edition*.

Accessing Optional Analytics Applications

Depending on the options you purchased with your Siebel operational application, you must perform additional steps in order to access the corresponding Oracle Business Intelligence options.

Additional options for Oracle Business Intelligence are:

- Oracle Sales Analytics
- Oracle Service Analytics
- Oracle Marketing Analytics
- Oracle Price Analytics
- Oracle Partner Analytics

By default, the dashboards and reports contained in these optional areas are hidden. If, for example, you purchased Sales Analytics with your Sales application, you must perform the additional steps shown in this procedure to access the Sales Analytics.

To turn on options for Sales Analytics:

1. Log in to Oracle Business Intelligence as Administrator.
2. Navigate to **Answers**, then **Oracle BI Presentation Services Administration** and select the option to manage Presentation Services groups and users.
3. Locate the Web Group corresponding to your option.

   The Web Group options are:

   - No Forecasting
   - No Forecasting Lite
   - No Universal Queuing
   - No Email Response
   - No Service Agreements
   - No Partner Marketing
   - No Partner ERM
   - No Partner ISS
4. Click on the **Edit** icon.
5. Under the Group Membership section, click the delete icon (**X**) to delete Analytics Users from this group.
6. Click **Finished** and log out of the application.
7. Log in again to access the additional optional dashboards and reports.

Customizing Oracle BI Applications Home Page and Dashboards

You can customize home page of Oracle BI Applications and dashboards.

1. Configuring a New Home Page to Use a Symbolic URL.
2. Determining the Oracle BI Report Path Argument.
3. Adding Views for Custom Oracle BI Interactive Dashboards.

Configuring a New Home Page to Use a Symbolic URL

Oracle BI Applications are integrated with Siebel operational applications using the symbolic URL infrastructure. This task describes how to use symbolic URLs to link a new report to a Siebel operational application home page and how to add new Analytics Dashboards to the Siebel operational application. The symbolic URL specifies how the HTTP request to the external application should be constructed and to defines any arguments and values to be sent as part of the request.

This information assumes that you have successfully built a symbolic URL to link some external content. For more information on the symbolic URL infrastructure, see *Siebel Portal Framework Guide*.
For each Analytical report on a Siebel operational application home page, there is a symbolic URL record defined that links the home page to the Analytics report. If you have not already done so, you must create a new home page and set it up to use a symbolic URL.

This figure shows example Inline and IFrame symbolic URL arguments:

Inline

Name	Required Argument	Argument Type	Argument Value	Append as Argument	Substitute in Text	Sequence #
Cmd	✓	Constant	Go	✓		1
Path	✓	Constant	/shared/Service/Service Requests	✓		2
Syndicate	✓	Constant	Siebel	✓		3
nqUser	✓	Command	UseSiebelLoginId	✓		4
nqPassword	✓	Command	UseSiebelLoginPassword	✓		5

IFrame

Name	Required Argument	Argument Type	Argument Value	Append as Argument	Substitute in Text	Sequence #
IFrameLogin:Cmd	✓	Constant	Logon	✓		1
Cmd	✓	Constant	PortalPages	✓		2
IFrameLogin:nqUser	✓	Command	UseSiebelLoginId	✓		3
IFrameLogin:nqPassword	✓	Command	UseSiebelLoginPassword	✓		4
PortalPath	✓	Constant	/shared/Service/_Portal/Activities	✓		5
PostRequest	✓	Command	PostRequest	✓		6
IFrameLogin:Syndicate	✓	Constant	Siebel	✓		7

To configure a new Home Page to use a symbolic URL:

1. Make sure the symbolic URL has been set up.
2. Launch the Siebel operational application and navigate to the Integration Administration, then Symbolic URL Administration view.
3. Query for the symbolic URL that has been set up for Analytics.

   The name of this symbolic URL should be exactly the same as the calculated value of the field that was added to the Business Component. For example, you might have a symbolic URL named HomePageAnalytics.

4. In the URL field, enter the Web URL. For example:

   ```
   http://NQHOST/Analytics/saw.dll
   ```

   For the Host Name, choose the Analytics Server Name from the drop-down list. This table shows the other parameters for reports.

Parameter	Value
NQHOST	A virtual name in the URL that points to the Oracle BI Presentation Services host
Fixup Name	Inside Applet
SSO Disposition	Inline
Oracle BI Presentation Services application name	Select from the drop-down list

5. Create the appropriate symbolic URL Arguments.

   These arguments depend upon the particular Analytics report that you are trying to display. The Argument Values should be the same for any Analytics report you work with, except for the Path Argument Value. To determine the path to the Analytics report, see Determining the Oracle BI Report Path Argument.

Determining the Oracle BI Report Path Argument

The Path argument provides the symbolic URL with the path to a report in Oracle BI Presentation Services. (For example, `/shared/Sales/Pipeline/Overview/Top 10 Deals`.) Use this procedure to determine the path to a report.

1. Log on to your Oracle BI Presentation Services as an Administrator.
2. In the Siebel operational application, navigate to **Answers**, then **Oracle BI Presentation Services Administration**.
3. Select **Manage Analytics Catalog**, and then navigate to your report.
4. Add this path name to the Symbolic URL argument.

   This table shows the symbolic URL path arguments for reports.

Name	Type	Path Argument Value	Append	Sequence #
Cmd	Constant	GO	Y	1
Path	Constant	`/shared/Sales/ Pipeline/ Overview/Top 10 Deals`	Y	2
Syndicate	Constant	Siebel	Y	3
nQUser	Command	UseSiebelLoginId	Y	4
nQPassword	Command	UseSiebelLoginPassword	Y	5
PostRequest	Command	PostRequest	Y	6

Adding Views for Custom Oracle BI Interactive Dashboards

You can add views for custom Oracle BI Interactive Dashboards.

This task is similar to that of adding Oracle Business Intelligence reports to the home page:

- Using Oracle's Siebel Tools, set up a new view.
- In the Siebel operational application, define a symbolic URL for that view.

To configure the symbolic URL for Analytics dashboards:

1. Define a Symbolic URL.
    a. Navigate to **Site** Map, then **Integration Administration**, then **Symbolic URL Administration**.
    b. In the Symbolic URL Administration view, add a new record.
2. Define Symbolic URL arguments.
    a. Navigate to **Symbolic URL Administration**.
    b. In the Symbolic URL Administration list, select the Symbolic URL you want to configure.

Viewing Information About Preconfigured Dashboards

If your organization has pre-built applications installed, you can use Catalog Manager to locate and view information about preconfigured dashboards.

You might have to expose the dashboards and requests.

Exposing Dashboards and Requests

Depending on the Oracle Business Intelligence options your organization purchased, you might need to expose these options before the associated dashboards and requests can be viewed in Oracle BI Presentation Services and in Catalog Manager.

This applies to sites that have these pre-built applications:

- Sales Analytics
- Service Analytics
- Contact Center Analytics
- Marketing Analytics
- Partner Analytics

Locating Dashboards, Page Names, and Reports

In Catalog Manager, the Presentation Catalog distributed with pre-built applications has this structure: Presentation Catalog followed by shared folder, pre-built application name, _portal folder, dashboard name, and page name.

The path to locate reports is Presentation Catalog followed by shared folder, pre-built application name, Folder name and Report name.

F

Preconfigured Mappings for Siebel System Subject Area

This information describes the preconfigured mappings for the Siebel Applications system subject area.

- About Preconfigured Mappings for Siebel System Subject Area

About Preconfigured Mappings for Siebel System Subject Area

For Oracle's Siebel Applications customers, the table describes the preconfigured mappings for the SA system subject area. Fields that are not available in the Siebel transactional database will default to values shown in the table.

- Overriding Defaults. You can add user-specific values for these fields, by creating an extension table to the S_USER table. to store the user-specific defaults for these fields. Additionally, you can change any of the default values. The metadata for the logical table can be modified to include any physical extension table.

  ```
  SA User.(User)
  ```

- Setting Provider Information. Typically, the cell phone and the fax numbers in the Oracle Business Analytics Warehouse do not contain a provider name. Therefore, the Pager will typically be a numeric value such as 555-483-3843. To append a provider to this address, use the following guidelines:
  - If the entire company has the same provider, then you can append the provider in the column mappings.
  - If users can have different providers, you must create an extension table.

Logical Column	Physical Table	Expression	Comments
Cell Phone		''	It might be mapped to S_CONTACT.CELL_PH_NUM if this field contains SMTP address.
Cell Phone Priority		''	Defaults to N
Display Name	S_CONTACT	"Real Time OLTP"."".SIEBEL.S_CONTACT_User.FST_NAME || ' ' || "Real Time OLTP"."".SIEBEL.S_CONTACT_User.LAST_NAME	First Name concatenated with Last Name
Email	S_CONTACT	EMAIL_ADDR	

Logical Column	Physical Table	Expression	Comments
Email Priority		'HNL'	Defaults to N
Email Type		'html'	Defaults to HTML
Group Name	S_RESP	NAME	
Handheld		''	Defaults to an empty string
Handheld Priority		''	Defaults to an empty string
Language		'en'	Defaults to 'en'
Locale		'en'	Defaults to 'en'
Logon	S_USER	LOGIN	
Pager		''	It could be mapped to S_CONTACT.PAGER_PH_NUM if this field contains SMTP address
Pager Priority		''	Defaults to N
Time Zone	S_TIMEZONE	NAME	