Operations Bridge Reporter

Software Version: 10.22
Windows® and Linux operating systems

Migration Guide

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Chapter 1: Migration

This section explains processes and procedures that help you to migrate data from the previous versions of Service Health Reporter (SHR) (9.3x/9.4x) to current version of Operations Bridge Reporter (OBR). It provides information about preparing, migrating and validating your system post migration.

> **Note:** Service Health Reporter is now Operations Bridge Reporter.

Need for Migration

SHR 9.x bundles the following components:

- SHR 9.x server
- SAP BusinessObjects server
- Sybase IQ server
- Remote Collector

OBR 10.x bundles the following components:

- OBR 10.x server
- SAP BusinessObjects server
- Vertica server
- Remote Collector

You have to migrate data from previous versions of SHR (9.x) to current version of OBR system for the following reasons:

SHR 9.x	OBR 10.x
Used SAP BusinessObjects 3.x as the reporting platform	Uses SAP BusinessObjects 4.x as the reporting platform
Used Sybase IQ as the database	Uses Vertica as database
Sybase IQ database supported on Windows 2008 operating system	Vertica database is supported only on Linux operating system

For more information on the supported operating system, see *Operations Bridge Reporter Release Notes.*

Audience

The information in this guide is intended for users who have administrator access.

Chapter 2: Migration Process Overview

This section gives you an overview of the migration process from SHR 9.3x/9.4x to the latest version of OBR in different deployment options using the Side-by-Side migration.

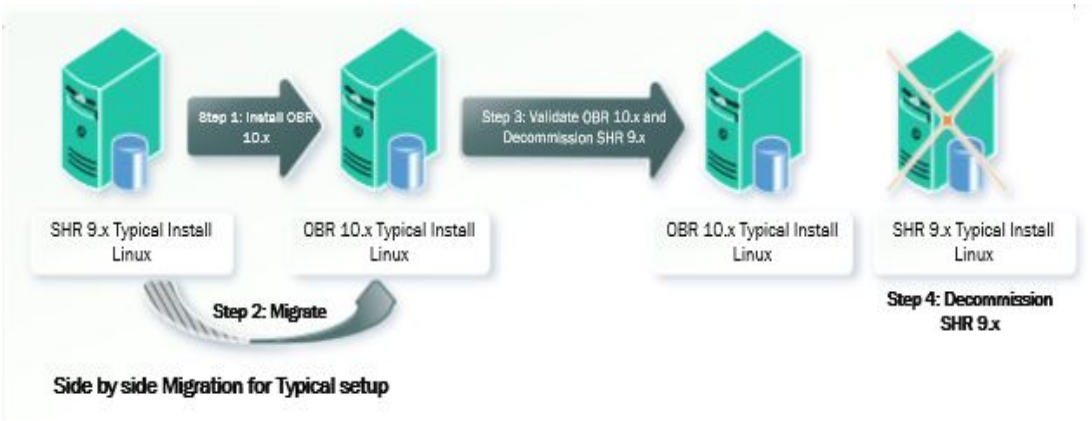
In Side-by-Side migration, OBR is installed on a different system and the data is migrated from SHR 9.3x/9.4x to OBR system. Additional systems are required for this type of migration. This migration method ensures SHR 9.3x/9.4x system is functional until OBR 10.22 is operational on a parallel system.

> **Note:** For information to install OBR 10.20 using different install scenarios, see *Operations Bridge Reporter Interactive Installation Guide*.

Migration of Typical Install (Single System)

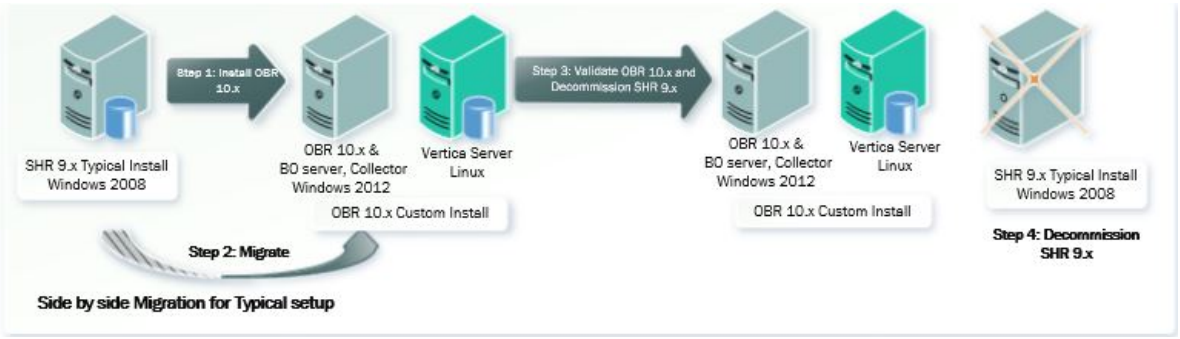
Following is the approach for migration of SHR 9.3x/9.4x typical install:

On Linux



- Install OBR 10.20 on a Linux system. Apply the OBR 10.22 patch.
- Migrate data and configuration from SHR 9.x to OBR 10.22 system.
- Validate the OBR 10.22 system and decommission SHR 9.3x/9.4x system.

On Windows

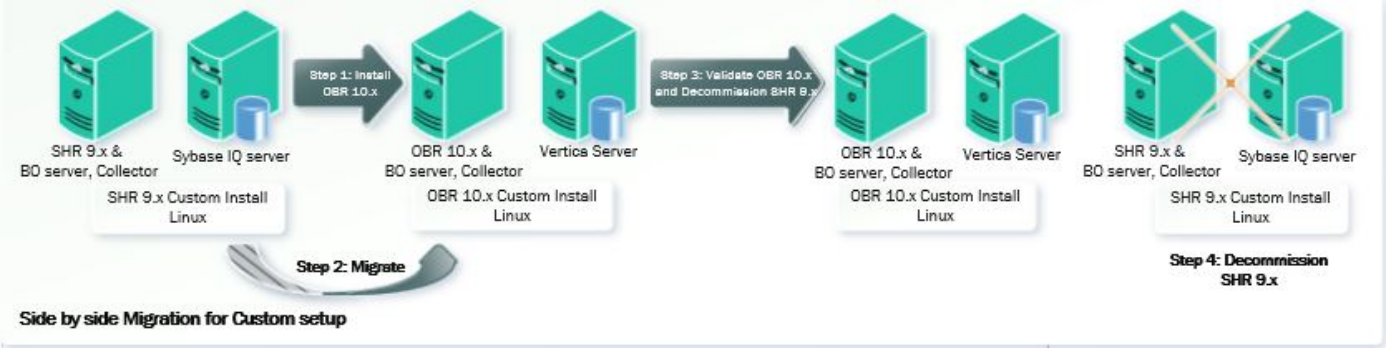


- Install OBR 10.20 server on Windows 2012 and database (Vertica) on Linux. Apply the OBR 10.22 patch on both the servers.
- Migrate data and configuration from SHR 9.x to OBR 10.22 system.
- Validate the OBR 10.22 system and decommission SHR 9.3x/9.4x system.

Migration of Custom Install (Distributed System)

Following is the approach for migration of SHR 9.3x/9.4x custom install:

On Linux



- Install OBR 10.20 server and database on different systems. Apply the OBR 10.22 patch on both the servers.

  > **Note:** In a custom install scenario, make sure that the OBR 10.22 patch is applied to all the OBR component servers.

- Migrate data and configuration to OBR 10.22.
- Validate the OBR 10.22 and decommission SHR 9.3x/9.4x.

On Windows

- Install OBR 10.20 server on Windows 2012 and database (Vertica) on Linux systems. Apply the OBR 10.22 patch on both the servers.

  > **Note:** In a custom install scenario, make sure that the OBR 10.22 patch is applied to all the OBR component servers.

- Migrate data and configuration from SHR 9.x and import it to OBR 10.22.
- Validate the OBR 10.22 and decommission SHR 9.3x/9.4x.

Chapter 3: Getting Started

This section helps you to prepare for migration before you start the migration process.

Planning for Migration

Perform the following steps to prepare for migration:

1. You must ensure that the system(s) that you plan to install OBR 10.20 is ready with all the sizing requirements completed.

   > **Note:** The requirements for the OBR 10.20 setup is significantly different from SHR 9.x. For OBR 10.20 sizing information, see *Operations Bridge Reporter Performance, Sizing and Tuning Guide*.
   >
   > For information on supported Operating System, see *Operations Bridge Reporter Release Notes*.
   >
   > In a typical scenario, apply the OBR 10.22 patch on the OBR 10.20 setup. In a custom install scenario, make sure that the OBR 10.22 patch is applied to all the OBR component servers.

2. Identify the data that has to be migrated. Also, identify the Content pack and the amount of data that you want to migrate.
3. Following are the storage requirements for SHR 9.3x/9.4x system for data export:
   a. Migration process is input/output intensive and the performance of migration is highly dependent on the disk performance. It is recommended to use a disk with 15,000 rpm or high performance for Migration.
   b. You must make sure that the disk is accessible from the OBR 10.20 system during import.
   c. The calculator feature in Migration can be used to calculate the downtime and the disk space required for exporting the specified data. For steps, see Task 2: Migration Precheck > Step *calc*.
4. Sybase IQ database in SHR 9.x uses main, temporary, and large buffer caches for database operations. You can increase the value of the buffer cache using the parameters `iqmc`, `iqtc` and `iqlm` located in the `{PMDB_HOME}/config/pmdbconfig.cfg` file for better database performance. Depending on the physical memory available in the system you can allocate the memory to the

Sybase IQ database.

After changing the values of the buffer cache, you must restart the Sybase IQ database.

5. Take a backup of the existing SHR data. For more information on backup, see the relevant version *Service Health Reporter Disaster Recovery Guide*.
6. Migrating from SHR 9.3x/9.4x to OBR 10.20 does not require a new license key.

   If there is a change in IP address, the rehost option in Licensing portal can be used to obtain the license key. You can either use the new Software Entitlement system website or log on to Administration Console and go to **Administration > Licensing > Launch HPE Password Center** and use the rehost option.
7. Identify the content that requires manual migration. The configurations that should be manually created in OBR 10.20 post migration are:
   a. OBR 10.20 uses the new universe format (unx) so schedules cannot be migrated. You should plan to recreate the schedules post migration.
   b. LDAP Settings and Server configuration settings on SAP BusinessObjects.
   c. User rights configured in SAP BusinessObjects.
   d. Users, User Groups and most of the Access Control List (ACL) can be migrated. However, the access level settings at folder, report or any other objects are not migrated. You should manually apply the security settings for each objects after migration to realign with the previous ones.

      > **Note:** The SAP BusinessObjects default users are not migrated.

   e. Security configuration: https, SSO and Client Authentication Certificate.

   > **Note:** The SAP BusinessObjects audit database and Orchestration (ABC) history data cannot be migrated.
8. Determine if you have custom content deployed on your SHR 9.3x/9.4x instance and plan the migration for custom content. Refer Migration Steps for Custom Content section for more details.

Migration Best Practices

Following are the best practices to reduce downtime during migration:

- Migrate in chunks - this helps to bring the OBR 10.20 system up early and start the collections.
- Threads: This is a tunable parameter in `Migration.conf` file which gets created after precheck. The default value is 20. If the I/O is under utilized then the value for the threads can be increased.

Chapter 4: Migration Steps

This chapter guides you with the steps to perform migration.

Task 1: Pre-migration

1. Install OBR 10.20. You can choose to install different components of OBR on a single system or different systems. For information on OBR 10.20 installation, see *Operations Bridge Reporter Interactive Installation Guide*.

   If you have configured Remote Collectors, ensure that the number of collectors configured in OBR 10.20 should be same as the number of collectors configured in SHR 9.3x/9.4x.

2. Install the OBR 10.22 patch. For steps, see *Operations Bridge Reporter Release Notes* for 10.22.

   For OBR 10.20 custom install scenario, install the OBR 10.22 patch on all the systems.

3. Perform the Post-installation steps. For more information on post-installation steps, see *Operations Bridge Reporter Configuration Guide*.

   > **Note:** You must not configure the Data Source and Topology Source at this stage.

   Deploy the same set of content packs that were deployed on SHR 9.3x/9.4x system on OBR 10.22 using the Content Packs Deployment page in the Administration Console.

4. From OBR 10.22 system, go to the location `{PMDB_HOME}`, copy the `OBR9x_10x_Migration_Binaries.zip` file to the `{PMDB_HOME}` location in SHR 9.3x/9.4x system.

   > **Note:** If SHR 9.3x/9.4x components are on Linux operating system, copy the `OBR9x_10x_Migration_Binaries.zip` file from OBR 10.22 on Linux operating system.
   >
   > In case of SHR 9.3x/9.4x custom install scenario, copy the `OBR9x_10x_Migration_Binaries.zip` file to all the SHR 9.3x/9.4x server components.

5. Unzip `OBR9x_10x_Migration_Binaries.zip` file in all SHR 9.3x/9.4x system(s). The `{PMDB_HOME}/Migration` folder will be created.

   Similarly, unzip `OBR9x_10x_Migration_Binaries.zip` file in all OBR 10.22 system(s). The `{PMDB_HOME}/Migration` folder will be created.

6. If any of the SHR 9.3x/9.4x component(s) is installed on Linux Operating System, perform the

following steps:

a. Go to `{PMDB_HOME}/Migration` folder.

b. Run the following command to give permission for `setup.sh` file:

```
chmod 777 setup.sh
```

c. Run the command: `./setup.sh`

Similarly, perform the following for OBR 10.22 component(s) installed on Linux Operating System:

a. Go to `{PMDB_HOME}/Migration` folder.

b. Run the following command to give permission for `setup.sh` file:

```
chmod 777 setup.sh
```

c. Run the command: `./setup.sh`

Task 2: Migration Precheck

1. Stop the collection and timer service on SHR 9.3x/9.4x server and wait for all the data to be processed, follow these steps:

> **Note:** If you have installed SHR 9.3x/9.4x Remote Collector, stop the collection service on the remote collector system.

On Windows:

a. Click **Start > Run**. The Run dialog box appears.

b. Type `services.msc` in the open field, and then press ENTER. The Services window appears.

c. Right-click on the following services and click **Stop**:

HP_PMDB_Platform_Collection

HP_PMDB_Platform_Timer

On Linux:

a. Go to the `/etc/init.d` directory, run the following commands on the command prompt:

On RHEL 6.x:

- `service HP_PMDB_Platform_Collection stop`
- `service TrendTimer stop`

2. On SHR 9.3x/9.4x server, make sure that the PostgreSQL service is running, follow these steps:

   On Windows:

   a. Click **Start > Run**. The Run dialog box appears.

   b. Type `services.msc` in the open field, and then press ENTER. The Services window appears.

   c. Check the status for the following service is **Running**:

      HP_PMDB_Platform_PostgreSQL

      If the service is not running, right-click on the service and click **Start**.

   On Linux:

   Go to the `/etc/init.d` directory, run the following commands on the command prompt:

   On RHEL 6.x: `service HP_PMDB_Platform_PostgreSQL status`

   If the service is not running, run the following command:

   On RHEL 6.x: `service HP_PMDB_Platform_PostgreSQL start`

   The status of the service must be Running.

3. On the SHR 9.3x/9.4x server execute the Migration Utility Precheck command to validate the readiness for data export.

   On successful precheck the following are created in the specified *<path>* of the SHR 9.3x/9.4x server:

   - `Migration.conf` file
   - `Summary` folder with `PrecheckSummary` html

   > **Note:** You should take necessary actions on "Pre-check failed" message from the Pre-check tool.

4. In case of remote SAP BusinessObjects server in SHR 9.3x/9.4x, copy the `config.prp` file from `{PMDB_HOME}/data` of SHR 9.3x/9.4x server to `{PMDB_HOME}/data` in SHR 9.3x/9.4x SAP BusinessObjects server.

   In case of remote Sybase IQ server, copy the `config.prp` file from `{PMDB_HOME}/data` of SHR 9.3x/9.4x server to `{PMDB_HOME}/data` in Sybase IQ server.

5. The `-calc` option in `migrationUtility` must be run on the SHR 9.3x/9.4x Sybase IQ server to calculate the downtime and the disk space required for exporting the specified data.

> **Note:** Make sure to execute the `precheck` option on the SHR 9.3x/9.4x server before executing `–calc` option.

Run the following command:

```
migrationUtility –calc <number of days>/-startDate <YYYY-MM-DD> -endDate <YYYY-MM-DD>
```

You can type the number of days or the start date and end date to calculate the downtime and the disk space required for exporting the data for the specified days.

> **Note:** The value displayed after running the `-calc` option is based on the benchmarks performed in the lab.

6. After successful precheck, in case of SHR 9.3x/9.4x custom install scenario, copy the folder that is created after precheck to all the SHR 9.3x/9.4x server components.

Task 3: Export

1. Execute the Migration Utility Export command to export Content Packs data, SAP BusinessObjects artifacts and Data Source Configuration in a zipped file format from SHR 9.3x/9.4x system(s).

   > **Note:** In SHR 9.3x/9.4x system during the export, the content data is exported from Sybase server, data source configuration from SHR server and BusinessObjects artifacts from SAP BusinessObjects server. In case of SHR custom (distributed) installation scenarios, run the export tool from each of SHR 9.3x/9.4x servers.

   On successful export the following folders are created in the specified *<path>* of the SHR 9.3x/9.4x system(s):

   - `Summary` folder with `ExportSummary` html
   - `BusinessObjects` folder with exported artifacts details. This folder consists of the following folders:
     i. `OBR.biar`: The BIAR file.
     ii. `bo.ini`: This file lists all the SAP BusinessObjects configurations that will be to be imported to the OBR 10.22 system
     iii. `export.log`: This is a text log file with the SAP BusinessObjects export log summary.

- `ContentData` folder with exported individual Content Pack data details. Each Content pack folder consists of the following folders:
  i. `csv`: This folder lists all the csv's to be imported on the 10.22 system.
  ii. `ret_csv`: This folder lists the dsi_retention table csv.
  iii. `sql` folder: This folder is created during the data export. It contains the SQLs required for exporting data.
- `metadata` folder with exported configuration details. This folder consists of the following folders:
  i. `configFiles`: This folder lists all the configurations to be imported on the 10.22 system.
  ii. `csv`: This folder lists all the csv's to be imported on the 10.22 system.
  iii. `RemoteCollector.prp`: This file consists the collection data to be imported on the 10.22 system.

Task 4: Import

1. Copy/Share/Mount the folder where the SHR 9.3x/9.4x data is exported to OBR 10.22 system(s).

   > **Note:** You must not Copy/Share/Mount the Migration export folder to the `/root` directory or to any user specific home directory.

2. If you have configured Remote Collectors in OBR 10.22, perform the following steps:
   a. On the OBR 10.22 server, go to the location where the export folder is copied/mounted/shared from SHR 9.3x/9.4x system.
   b. Open the `metadata` folder and edit the `RemoteCollector.prp` file as follows:

   ```
   collectormapping
   local=local
   RC9x=<edit this value with OBR 10.22 Remote Collector Name>
   ```

3. In case of remote SAP BusinessObjects server in OBR 10.22, copy the `config.prp` file from `{PMDB_HOME}/data` of OBR 10.22 server to `{PMDB_HOME}/data` of SAP BusinessObjects server.

   In case of remote Vertica server, copy the `config.prp` file from `{PMDB_HOME}/data` of OBR 10.22 server to `{PMDB_HOME}/Migration` of Vertica server.

4. Stop collection, job manager, task manager and orchestration service on the OBR 10.22 server, follow these steps:

> **Note:** If you have installed OBR 10.22 Remote Collector, stop the collection service on the remote collector system.

On Windows:

a. Click **Start > Run**. The Run dialog box appears.

b. Type `services.msc` in the open field, and then press ENTER. The Services window appears.

c. Right-click on the following services and click **Stop**:

HPE_PMDB_Platform_Collection

HPE_PMDB_Platform_Orchestration

HPE_PMDB_Platform_JobManager

HPE_PMDB_Platform_TaskManager

On Linux:

a. Go to the `/etc/init.d` directory, run the following commands on the command prompt:

On RHEL 6.x/SUSE Linux Enterprise Server 11:

- `service HPE_PMDB_Platform_Collection stop`
- `service HPE_PMDB_Platform_Orchestration stop`
- `service HPE_PMDB_Platform_JobManager stop`
- `service HPE_PMDB_Platform_TaskManager stop`

On RHEL 7.x:

- `systemctl stop HPE_PMDB_Platform_Collection.service`
- `systemctl stop HPE_PMDB_Platform_Orchestration.service`
- `systemctl stop HPE_PMDB_Platform_JobManager.service`
- `systemctl stop HPE_PMDB_Platform_TaskManager.service`

5. On OBR 10.22 server, make sure that the PostgreSQL service is running, follow these steps:

On Windows:

a. Click **Start > Run**. The Run dialog box appears.

b. Type `services.msc` in the open field, and then press ENTER. The Services window appears.

c. Check the status for the following service is **Running**:

HPE_PMDB_Platform_PostgreSQL

If the service is not running, right-click on the service and click **Start**.

On Linux:

Go to the `/etc/init.d` directory, run the following commands on the command prompt:

On RHEL 6.x/SUSE Linux Enterprise Server 11: `service HPE_PMDB_Platform_PostgreSQL status`

On RHEL 7.x: `systemctl status HPE_PMDB_Platform_PostgreSQL.service`

If the service is not running, run the following command:

On RHEL 6.x/SUSE Linux Enterprise Server 11: `service HPE_PMDB_Platform_PostgreSQL start`

On RHEL 7.x: `systemctl start HPE_PMDB_Platform_PostgreSQL.service`

6. Execute the Migration Utility Import command to import Content Packs data, SAP BusinessObjects artifacts and Data Source Configuration from SHR 9.3x/9.4x system(s) to OBR 10.22 system(s).

> **Note:** In OBR 10.22 system during the import, the content data gets imported to Vertica server, data source configuration to OBR server and BusinessObjects artifacts to SAP BusinessObjects server. In case of OBR custom (distributed) installation scenarios, make sure to copy the exported folder from SHR 9.3x/9.4x system(s) to the respective OBR 10.22 system(s).
>
> For example, if you have a typical SHR 9.3x/9.4x scenario in Windows operating system, and you want to migrate to the custom install scenario where OBR 10.22 server and SAP BusinessObjects server are on single system and Vertica server on remote system, copy/share/mount the exported folder from the SHR 9.3x/9.4x system to both the OBR 10.22 systems.
>
> In case of OBR custom (distributed) installation scenarios, run the import tool from each of OBR servers.

> **Note:** After successful data import on OBR 10.22 system, if Generic database (for example: Sybase database) is configured as data source, copy the `jconn4.jar` from `{SYBASE}/jConnect-7_0/classes` on Sybase IQ server to `{PMDB_HOME}/lib` directory on OBR 10.22 system for connection and collection to work fine.

Task 5: Post-migration

1. Verify the summary of old data and new data migrated from `CompareSummary.htm`. For more details, see Validation using Summary HTMLs.
2. Start collection, job manager, task manager and orchestration service on the OBR 10.22 server, follow these steps:

   > **Note:** If you have installed OBR 10.22 Remote Collector, start the collection service on the remote collector system.

   On Windows:

   a. Click **Start > Run**. The Run dialog box appears.

   b. Type `services.msc` in the open field, and then press ENTER. The Services window appears.

   c. Right-click on the following services and click **Start**:

   HPE_PMDB_Platform_Collection

   HPE_PMDB_Platform_Orchestration

   HPE_PMDB_Platform_JobManager

   HPE_PMDB_Platform_TaskManager

   On Linux:

   a. Go to the `/etc/init.d` directory, run the following commands on the command prompt:

   On RHEL 6.x/SUSE Linux Enterprise Server 11:

   - `service HPE_PMDB_Platform_Collection start`
   - `service HPE_PMDB_Platform_Orchestration start`
   - `service HPE_PMDB_Platform_JobManager start`
   - `service HPE_PMDB_Platform_TaskManager start`

   On RHEL 7.x:

   - `systemctl start HPE_PMDB_Platform_Collection.service`
   - `systemctl start HPE_PMDB_Platform_Orchestration.service`
   - `systemctl start HPE_PMDB_Platform_JobManager.service`
   - `systemctl start HPE_PMDB_Platform_TaskManager.service`

Chapter 5: Migration Utility

OBR migration provides `migrationUtility` that helps you to migrate data from SHR 9.3x/9.4x system to the latest version of OBR.

The command to run the utility is as follows:

```
migrationUtility -precheck/-export/-import/-dataSourceClean/-calc
```

To get more information on the usage of the utility, run the command: `migrationUtility -help`

- Precheck option
- Export option
- Import option
- Validation using Summary HTMLs

Precheck option

The Precheck option performs all the checks needed for migration as follows:

- Checks if the Collection service is stopped on both the remote collector and the SHR system.
- Checks if Data from the remote collector is moved to the SHR system.
- Checks if there are files pending in the collect and stage folder. If the files are not processed or in pending state the precheck fails and displays the message *Pre-check failed*.
- Checks if all the data from the stage table gets processed.
- Checks if the Timer service is stopped on the SHR system.

The following table lists the parameters in `Migration.conf` file:

Parameter	Options	Description
Pre-check	PASSED| FAILED	The information on the precheck status will be displayed. The value for precheck will be `PASSED` if the precheck is successful and `FAILED` if the precheck fails.
Content Packs	yes | no	Lists all installed Content Packs on SHR 9.x system. The default value is `yes`, all the installed Content Packs will be

		exported. You can change the value to `no` to exclude the export of specific Content pack. Example: Core=yes SYSTEM=yes MSAppCore=yes AppCore=no WebLogic=no
• fact • hourly • daily	all | number of days	Specify the number of days for the table to export data. The value `all` is specified if all of the data in the table has to be exported. If you want to export data for a specific number of days from these tables specify the value for number of days. Example: fact=5 In the above example, the data of the last 5 days from the current system date will be exported.
• factStartDate • factEndDate • hourlyStartDate • hourlyEndDate • dailyStartDate • dailyEndDate	yyyy-mm-dd	Specify the start date and end date for the table to export data. The format to specify the date to export the data is `yyyy-mm-dd`. Example: factStartDate =2015-01-01 factEndDate=2015-01-31 The data of the specified start date and end date will be migrated. If the end date is not specified then the data untill the current system date will be migrated. **Note:** If the EndDate is specified for fact, hourly and daily values, then the EndDate value will take the priority over the number of days value.
concurrent_ processes	10	The number of concurrent processes for which the data has to be exported.
chunk_rate	30	The number of days for data export batch.
SHR_OS	windows | linux	The Operating System of SHR 9.x from where the data is exported.

Precheck option command

To run the precheck option, go to the location `{PMDB_HOME}/bin` and run the following command:

`migrationUtility –precheck –path <path>`

where, *<path>* is the location of the folder where you want the precheck artifacts to be created.

> **Note:** You must make sure that the *<path>* is a folder and not drive.

Example:

Linux: `migrationUtility –precheck –path /opt/upgrade_pack`

Windows: `migrationUtility –precheck –path C:\upgrade_pack`

Export option

The Export option helps you to export the Content Packs data, SAP BusinessObjects artifacts and Data Source Configuration in a zipped file format.

In SHR 9.3x/9.4x system during the export, the content data is exported from Sybase server, data source configuration from SHR server and BusinessObjects artifacts from SAP BusinessObjects server. In case of SHR custom (distributed) installation scenarios, run the export tool from each of SHR 9.3x/9.4x servers.

> **Note:** For the OMi Content pack migration, the data of minimum 35 days must be migrated at once.

Content Pack data

The Export option reads the data from `Migration.conf` file that is created in the SHR 9.3x/9.4x system after the precheck is completed. The data of the Content packs that are specified as `yes` in `Migration.conf` file will be exported.

> **Note:** If you do not want to export specific Content pack then change the `yes` option to `no` in the `Migration.conf` file.

SAP BusinessObjects artifacts

The following SAP BusinessObjects artifacts created by the SAP BusinessObjects non-default user in SHR 9.3x/9.4x can be exported using the Export option:

- Users
- UserGroups

- Access levels

> **Note:** If the SAP BusinessObjects non-default user has mapped the users, usergroups and Access levels in SHR 9.3x/9.4x, then after migrating to OBR 10.22 the mapping has to be done manually. This is because of the change in universe objects in OBR 10.22.

Data Source Configuration

The Export option helps you to export the Data Source Configurations from a SHR 9.3x/9.4x system.

Export option command

On the SHR 9.3x/9.4x system(s), go to the location `{PMDB_HOME}/bin` and run the following command:

```
migrationUtility –export –path <path>
```

> **Note:** You must specify the folder path that has been created after migration precheck. Do not create the folder before as the export tool creates the folder after execution. In case of SHR 9.3x/9.4x distributed scenario, on the SAP BusinessObjects server and/or Sybase IQ server, specify the folder path that you have copied from the SHR 9.3x/9.4x server.
>
> If you are executing the export tool again, then the precheck should be run with a different folder and the export should also be done to a new folder.

where, *<path>* is the location where you export data.

To export the Content Data and/or Data Source and/or BO Artifacts, run the following command:

```
migrationUtility –export –path <path> [-run contentData,dataSource,boArtifacts]
```

For Example: `migrationUtility –export –path /opt/migrateall -run contentData,dataSource`

The above example exports the Content Data and the Data Source Configuration data.

To export all the Content Data and/or Data Source and/or BO Artifacts, run the following command:

```
migrationUtility –export –path <path>
```

On a remote Sybase IQ server, to export Content Data, run the following command:

```
migrationUtility –export –path <path> [-run contentData]
```

The above command exports the Content Data from remote Sybase IQ server.

The following log files for the export tool is available at the location `{PMDB_HOME}/log/`:

- metaDataMigrate.log
- boMigrate.log
- contentDataMigrate.log
- migrationUtility.log

After running the Export option, the ExportSummary html is created with details of the exported data.

Import option

The Import option helps you to import the Content Packs data, SAP BusinessObjects artifacts and Data Source Configuration.

In OBR 10.22 system during the import, the content data gets imported to Vertica server, data source configuration to OBR server and BusinessObjects artifacts to SAP BusinessObjects server. In case of OBR custom (distributed) installation scenarios, make sure to copy the exported folder from SHR 9.3x/9.4x system(s) to the respective OBR 10.22 system(s).

For example, if you have a typical SHR 9.3x/9.4x scenario in Windows operating system, and you want to migrate to the custom install scenario where OBR 10.22 server and SAP BusinessObjects server are on single system and Vertica server on remote system, copy/share/mount the exported folder from the SHR 9.3x/9.4x system to both the OBR 10.22 systems.

In case of OBR custom (distributed) installation scenarios, run the import tool from each of OBR servers.

> **Note:** For the OMi Content pack migration, the data of minimum 35 days must be migrated at once.

Content Pack data

The Import option reads the data from Migration.conf file. The data of the Content Packs that are specified as yes in Migration.conf file will be imported.

> **Note:** If you do not want to import specific Content Pack then change the yes option to no in the Migration.conf file.

SAP BusinessObjects artifacts

The following SAP BusinessObjects artifacts of SHR 9.3x/9.4x to OBR 10.22 is imported using the Import option:

- Users
- Usergroups
- Access levels

Data Source Configuration

This option helps you to import Data Source Configurations from a SHR 9.3x/9.4x system to OBR 10.22 system.

You must make sure that the following actions are completed on the OBR 10.22 system before the Import option is run:

- OBR 10.20 is installed. Configure Remote Collector if required.
- The OBR 10.22 patch is installed.
- Post installation steps are performed.
- Install the Content Packs msi(s) and deployed.
- Copy the folder where the SHR 9.3x/9.4x data is exported to OBR 10.22 system.
- The Collection and Orchestration services are stopped.

> **Note:** The `dataSourceClean` option can be used to re-import the data to *OBR* 10.22 system. This option cleans the tables with the previous imported data.
>
> You can use this option only when:
>
> 1. The Data Source Configuration data is already imported once to *OBR* 10.22 system.
> 2. The data collection is NOT started on the *OBR* 10.22 system.
>
> **dataSourceClean option command:**
>
> ```
> migrationUtility -dataSourceClean
> ```

Import option command

To import the all of the data, go to the location `{PMDB_HOME}/bin` and run the following command:

> **Note:** If OBR 10.22 is installed on non-default drive in Windows operating system, execute Import option on command prompt from `C:/` drive.

`migrationUtility –import –path <path>`

where, *<path>* is the location where the export folder is copied/shared/mounted on the OBR 10.22 system.

To import the Content Data and/or Data Source and/or BO Artifacts, run the following command:

`migrationUtility –import –path <path> [-run contentData,dataSource,boArtifacts]`

For Example: `migrationUtility –import –path /opt/migrateall [-run boArtifacts,dataSource]`

The above example imports the BO Artifacts and the Data Source Configuration data.

The following log files for the Import option is available at the location `{PMDB_HOME}/log`:

- `metaDataMigrate.log`
- `boMigrate.log`
- `contentDataMigrate.log`
- `migrationUtility.log`

After running the Import option, the `ImportSummary` html is created with details of the imported data.

Calculator Option

The calculator feature in Migration can be used to calculate the downtime and the disk space required for exporting the specified data.

The `-calc` option in `migrationUtility` must be run on the SHR 9.3x/9.4x Sybase IQ server to calculate the downtime and the disk space required for exporting the specified data.

> **Note:** Make sure to execute the `precheck` option on the SHR 9.3x/9.4x server before executing `–calc` option.

Run the following command:

```
migrationUtility –calc <number of days>/-startDate <YYYY-MM-DD> -endDate <YYYY-MM-DD>
```

You can type the number of days or the start date and end date to calculate the downtime and the disk space required for exporting the data for the specified days.

> **Note:** The value displayed after running the `-calc` option is based on the benchmarks performed in the lab.

Chapter 6: Validation using Summary HTML

The Validation Summary HTML helps the user to verify if migration is successful. These Summary HTML are available in the path that you have specified while running the import and export option.

Following are the HTML available:

- **PrecheckSummary.htm** - This HTML is created after the precheck tool is run successfully. It provides information of the installed Content Packs for export. You can click on the links provided for the individual Content Packs for more details.
- **ExportSummary.htm** - This HTML is created after the export tool is run successfully. It provides information of the installed Content Packs that are exported. You can click on the links provided for the individual Content Packs for more details.
- **ImportSummary.htm** - This HTML is created after the import tool is run successfully. It provides information of the Content Packs that are imported. You can click on the links provided for the individual Content Packs for more details.
- **CompareSummary.htm** - This HTML provides comparative information of the Content packs that are migrated. The value of the columns **No. of Records Imported** and **No. of Records Exported** can be referred to compare the data. The Import Status column displays *true* if the No. of Records Imported and No. of Records Exported is same else it displays **false**. For a successful import the No. of Records Imported and No. of Records Exported columns should have same values and the Import Status column should display *true*.

  > **Note:** If you have completed migration and started the collections in the OBR 10.22 system, and there is another migration done after few days, there can be miss-match in the Compare Summary for dimensions.

Along with the above mentioned HTMLs, there are following folders that consists of individual HTML of each migrated Content Pack:

- Precheck
- Import
- Export

Chapter 7: Migration Steps for Custom Content

This section describes the approach to migrate custom content.

Custom Reports and/or Universe on Custom Schema

If you have developed new reports on the universe or created new universe shipped in SHR 9.3x/9.4x then these reports and universe can be migrated to OBR 10.22. Follow these steps to migrate new reports and universe:

1. From SHR 9.3x/9.4x's SAP BusinessObjects 3.x installed system, "Export universe and related reports as BIAR" on page 32.
2. Follow these steps for universe migration
   a. Change the connection to vertica connection from BO 4.x.
   b. If there are any Sybase specific SQLs move it to Vertica.
3. Use BO 4.x "Upgrade Management Tool (UMT) " on page 45 on OBR 10.22 and import these reports.
4. "Convert unv to unx" on page 51 using Information Design Tool (IDT).

   > **Note:** XCelsius dashboards using Qaaws does not work with unx.

5. "Use Remapping Tool " on page 55 on OBR 10.22 to map the reports to OBR 10.x universe.

Custom Domain, Application and ETL Content

Domain content

To migrate the Domain content from SHR 9.3x/9.4x to OBR 10.22 system, follow these steps:

1. Compile the domain content with OBR 10.22 CDE.
2. Port Sybase IQ procedures, if any, to Vertica scripts and update ABC step definition.
3. Deploy the content on OBR 10.22.

4. Migrate the data from SHR 9.3x/9.4x to OBR 10.22. Use the migration script generation tool to generate migration scripts. You can modify the script if required and use the scripts to export data from SHR 9.3x/9.4x and import the data to OBR 10.22.
5. Create Manifest and compile content pack. For steps, see *Operations Bridge Reporter Content Development Guide*.

Application content

To migrate the Application content from SHR 9.3x/9.4x to OBR 10.22 system, follow these steps:

1. To migrate the application content the "LCM BIAR " on page 58should be taken.
2. Create Manifest and compile content pack. For steps, see *Operations Bridge Reporter Content Development Guide*.

To migrate app content, perform the steps described in Custom Reports and/or Universe on Custom Schema section.

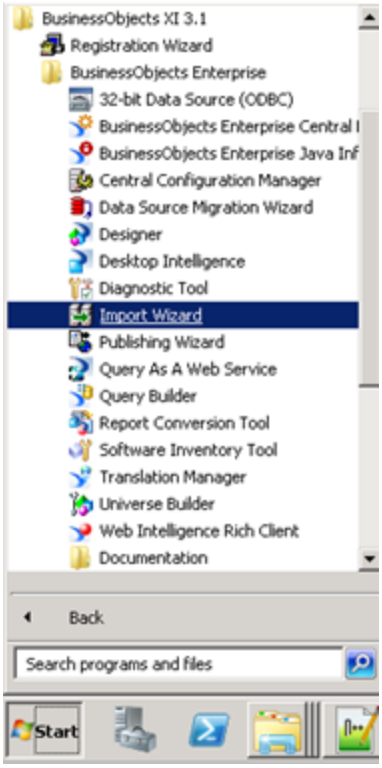
To migrate the ETLcontent from SHR 9.3x/9.4x to OBR 10.22 system, follow these steps:

1. If your ETL uses Sybase IQ specific SQLs/functions in DB collection policies, port it to Vertica.
2. If your ETL uses Sybase IQ specific SQLs/functions in stage rules, port it to Vertica.
3. Compile the ETL content with OBR 10.22 CDE.
4. Deploy the ETL on OBR 10.22. For steps, see *Operations Bridge Reporter Content Development Guide*.

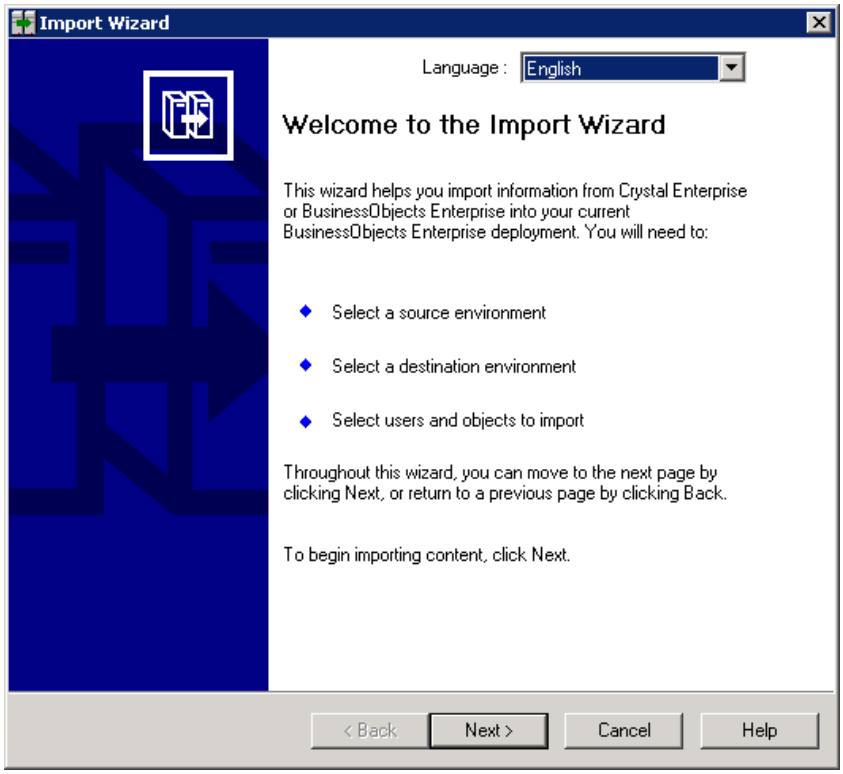
Reference

Export universe and related reports as BIAR

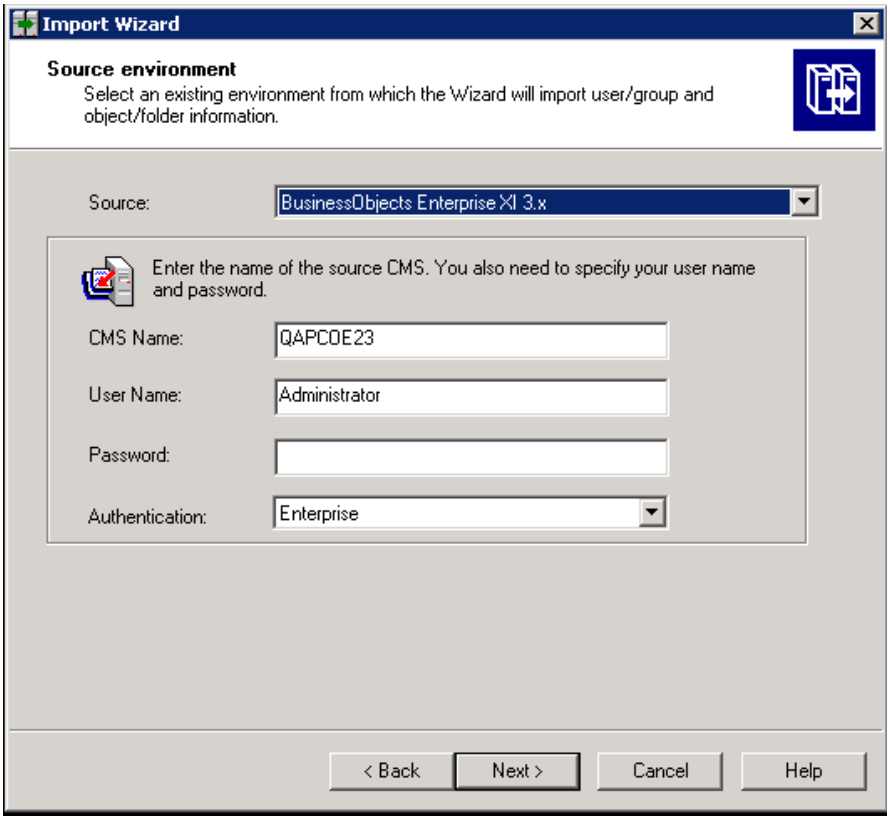
1. From SHR 9.3x/9.4x system, click **Start > All Programs > BusinessObjects XI 3.1 > Import Wizard** .



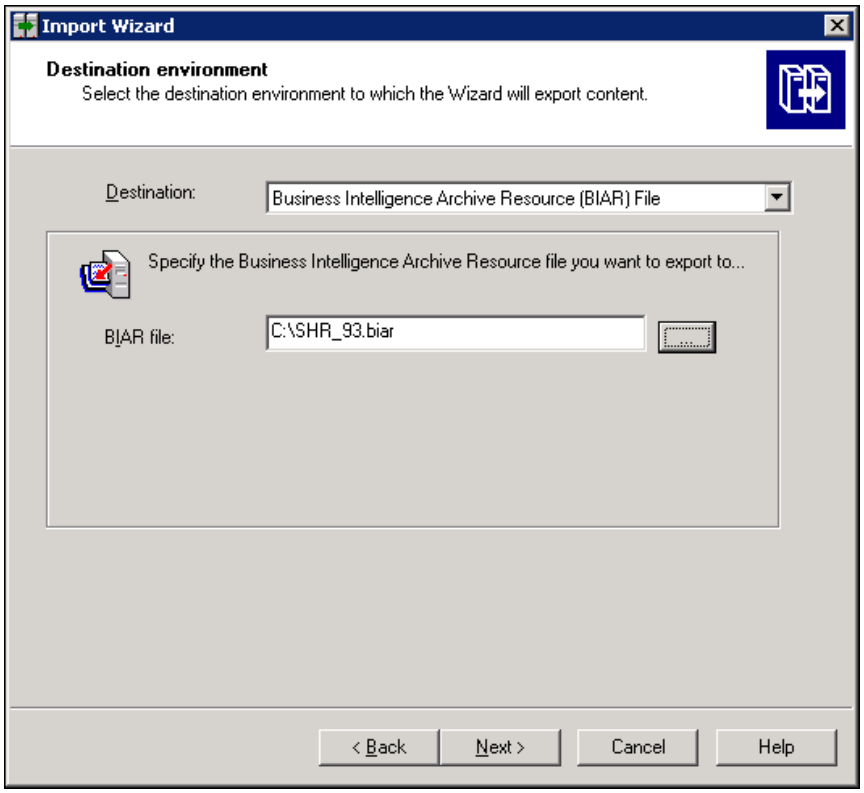
2. The welcome screen of the Import Wizard appears. Click **Next**.



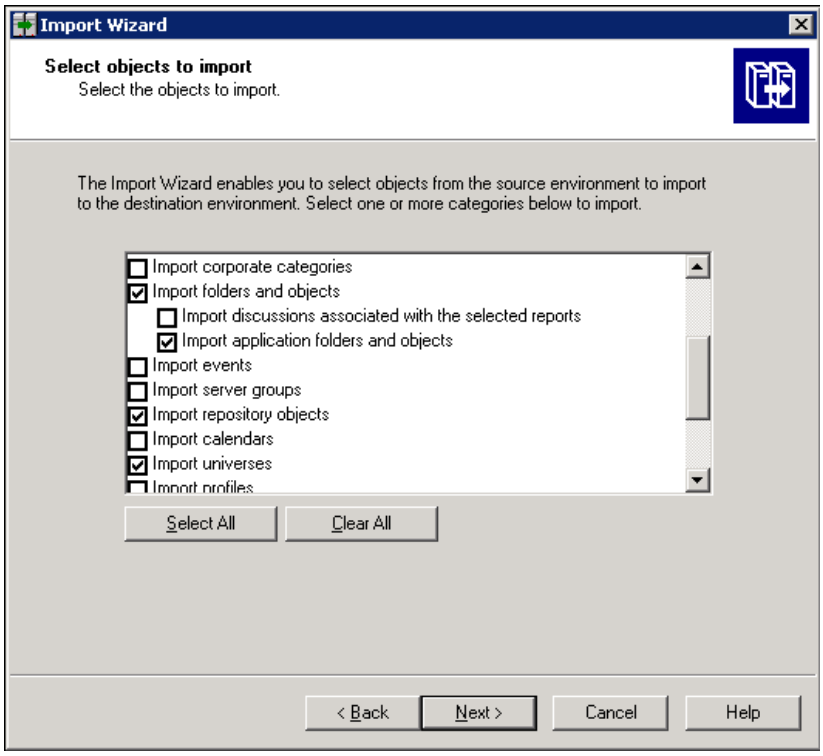
3. In the **Source** drop-down, select **BusinessObjects Enterprise XI 3.x** and click **Next**.



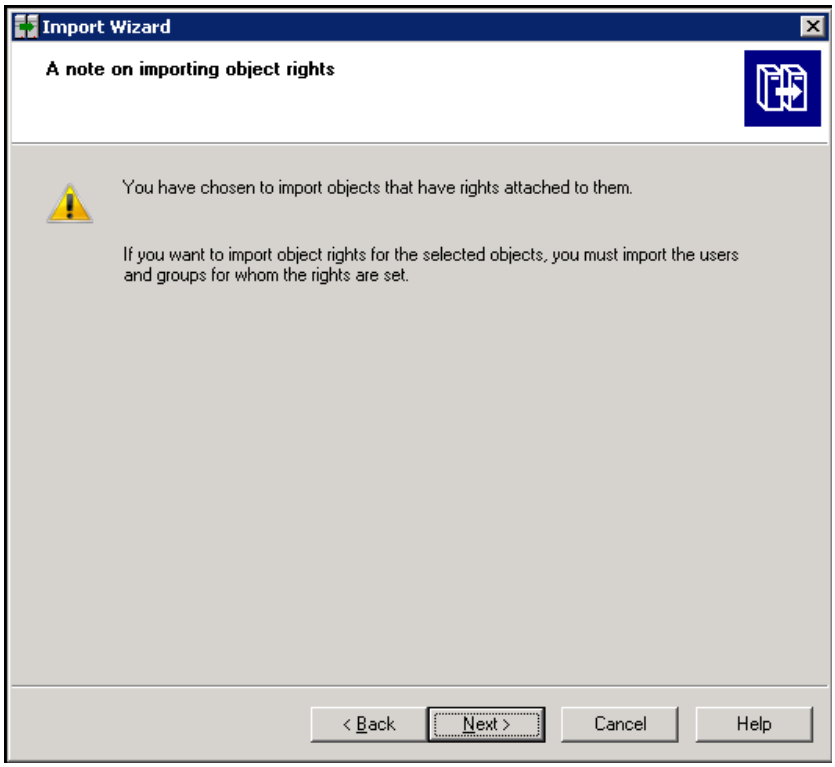
4. In the **Destination** drop-down, select **Business Intelligence Archive Resource (BIAR) File** and click **Next**.



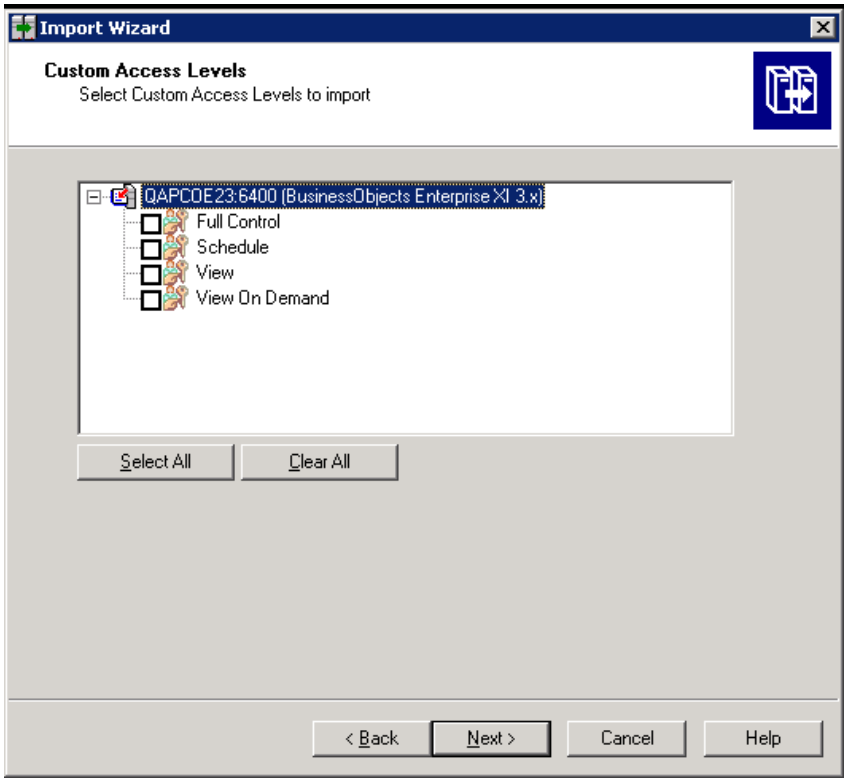
5. Select the check-boxes as shown in the following image and click **Next**.



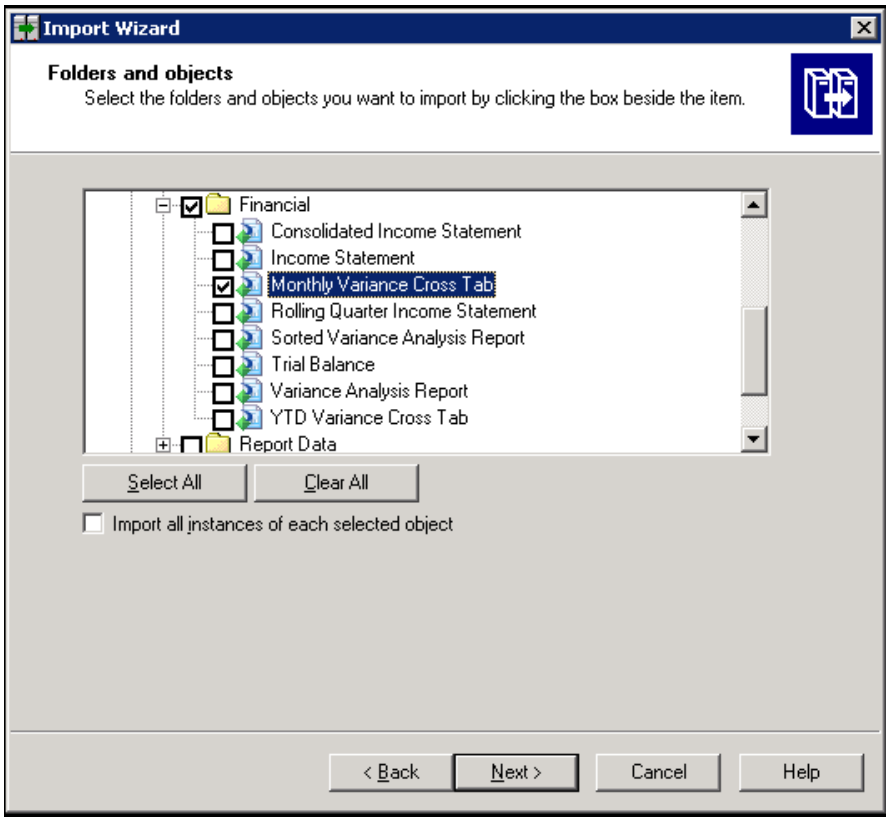
6. A note on importing object rights appears, click **Next**.



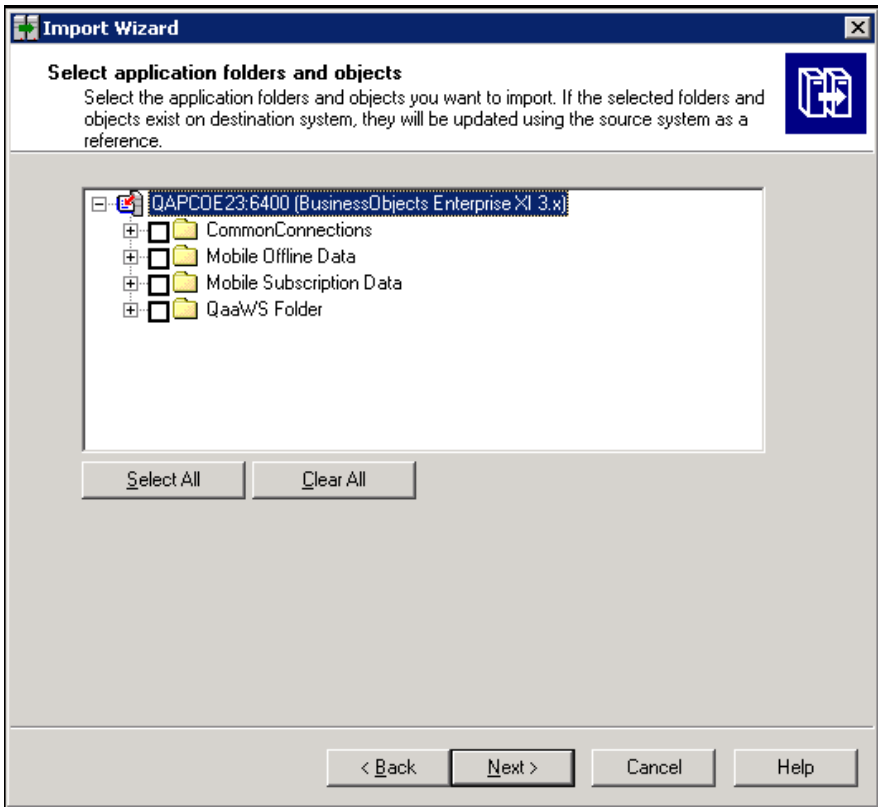
7. Click **Next** on the Custom Access Levels screen.



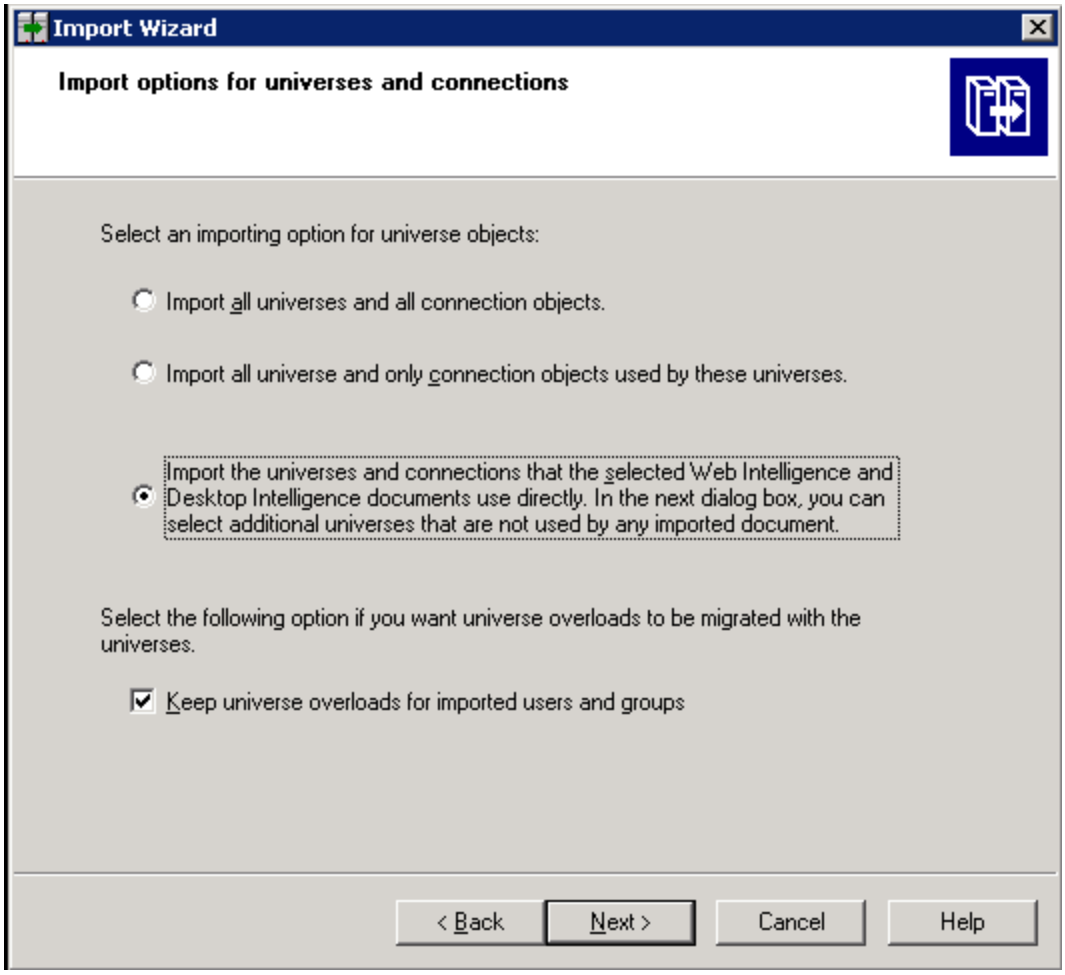
8. Select Custom Content Pack reports and click **Next**.



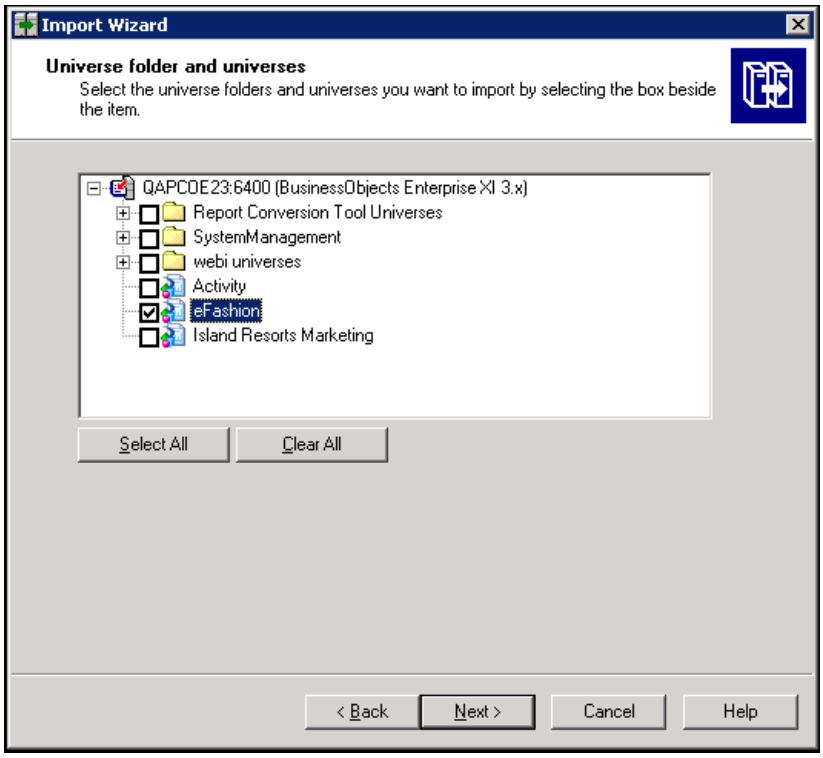
9. Select Next.



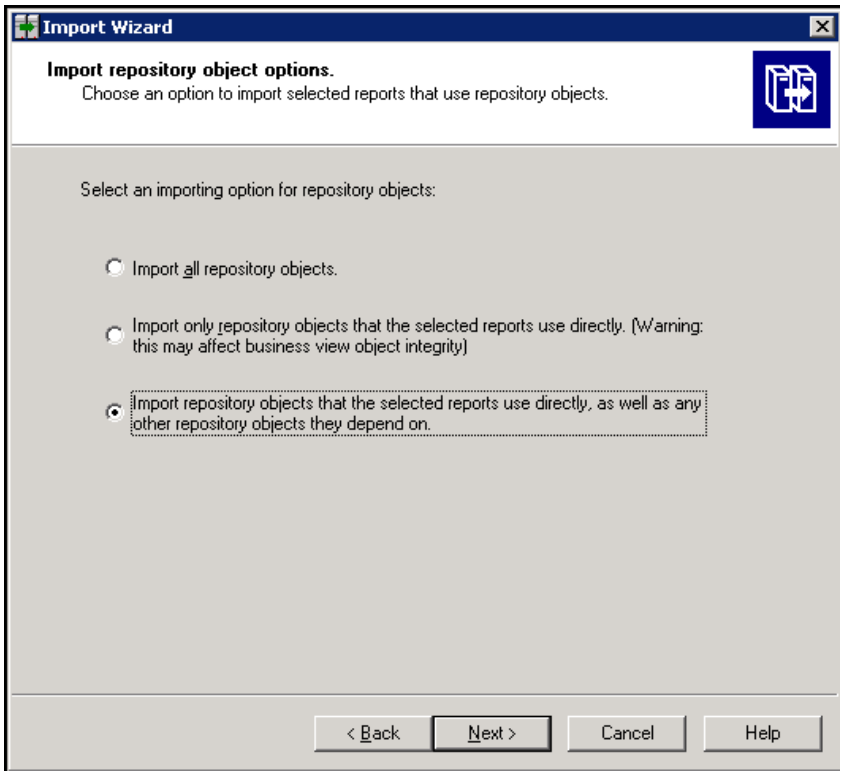
10. Select the option for **Select an importing option for universe objects:** as shown in the following image and click **Next**.



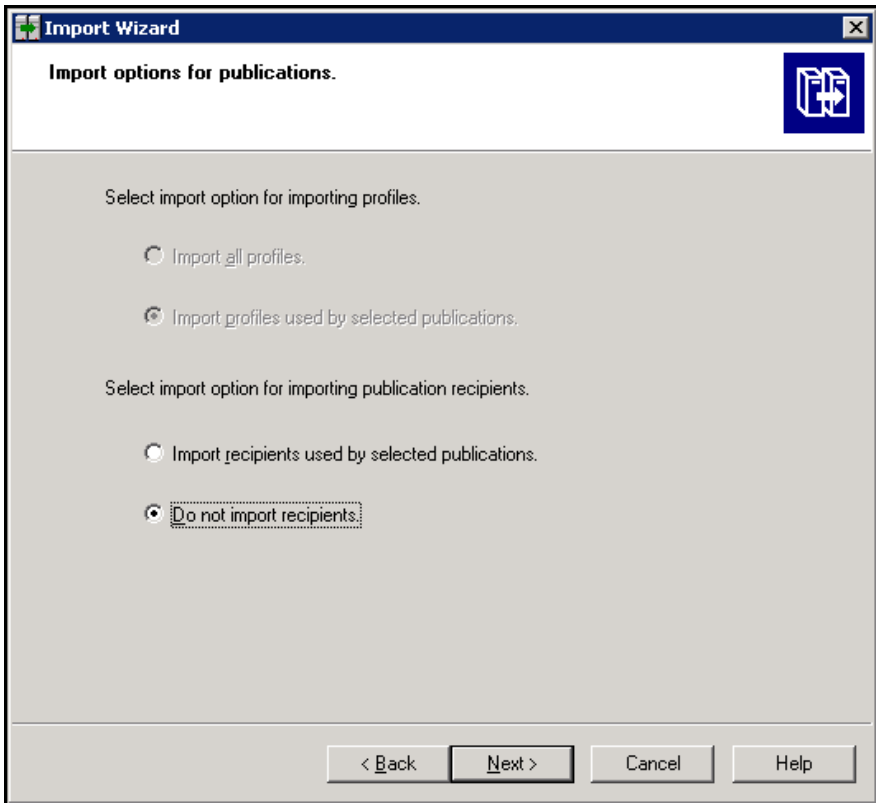
11. The Universe will be selected by default, click **Next**.



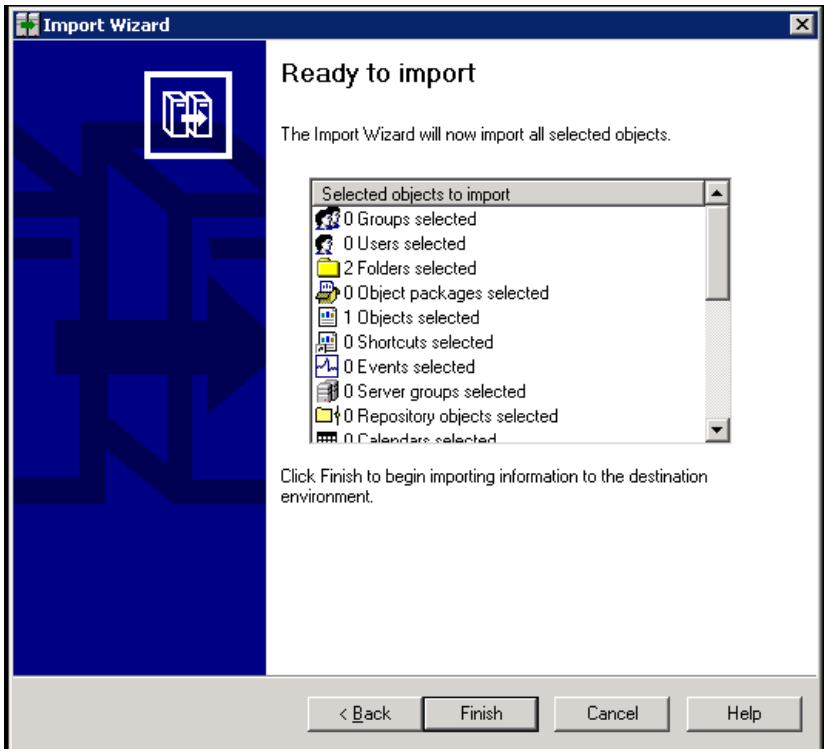
12. Select the option for **Select an importing option for repository objects:** as shown in the following image. Click **Next**.



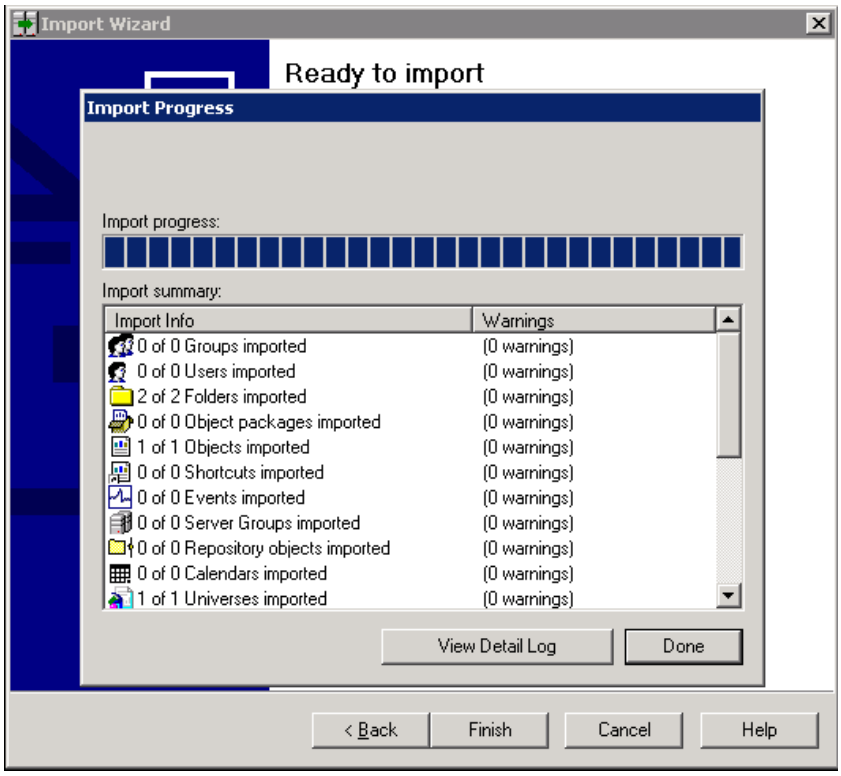
13. Select **Do not import recipients** and click **Next**.



14. The Ready to import screen appears with import details, click **Finish**.



15. Click **View Detail Log** to check if all the objects were successfully imported to BIAR.



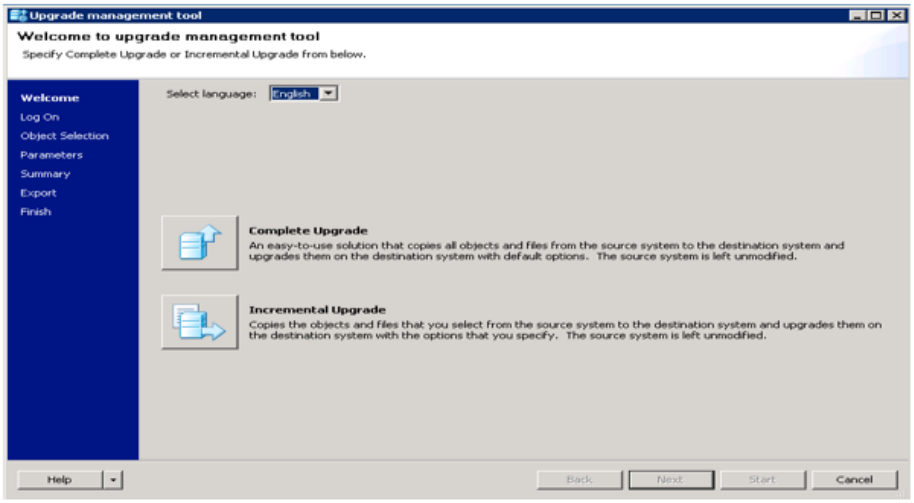
16. Copy the BIAR file from the location to the specified location.

Upgrade Management Tool (UMT)

Perform the following steps on OBR 10.22 system and import the custom reports.

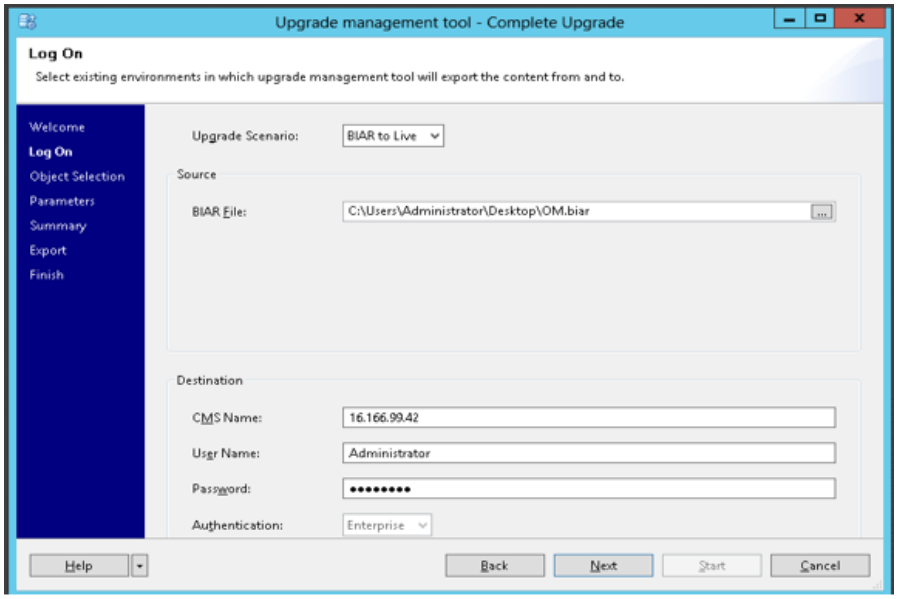
For Windows:

1. In **Search**, type Upgrade Management Tool. The welcome page appears.

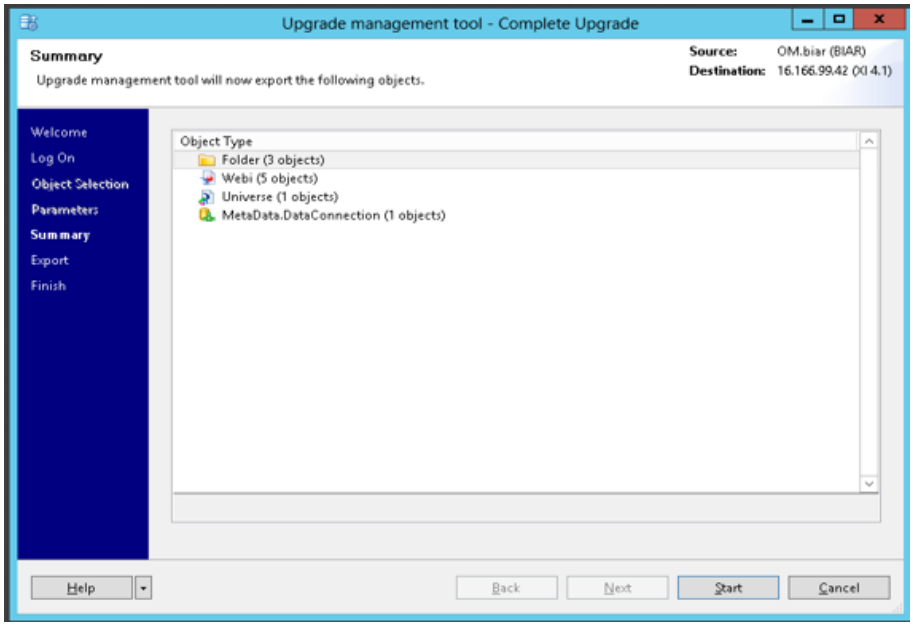


   Click **Complete Upgrade**, and click **Next**

2. In Upgrade Scenario select **Biar to Live**, select the Source BIAR file. In **Destination**, type the CMS Name and credentials click **Next**.



Click **Start**.



After completion upgrade the BIAR into 4.1 system.

> **Note:** You must install the SAP BusinessObjects client tools that is shipped as part of OBR media.

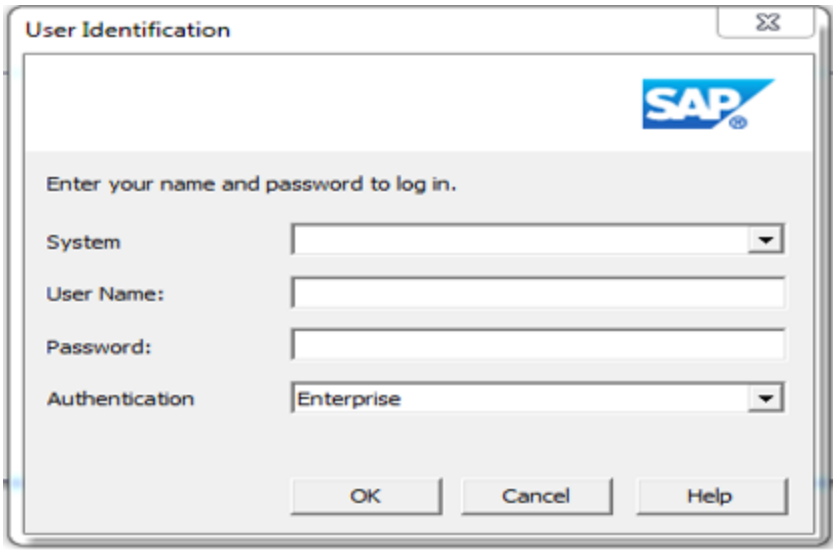
For Linux:

1. Go to the locaton `<BOinstallpath>/sap_bobj/enterprise_xi40/java/apps/upgradeManagementTool/jars`
2. Run the following command:

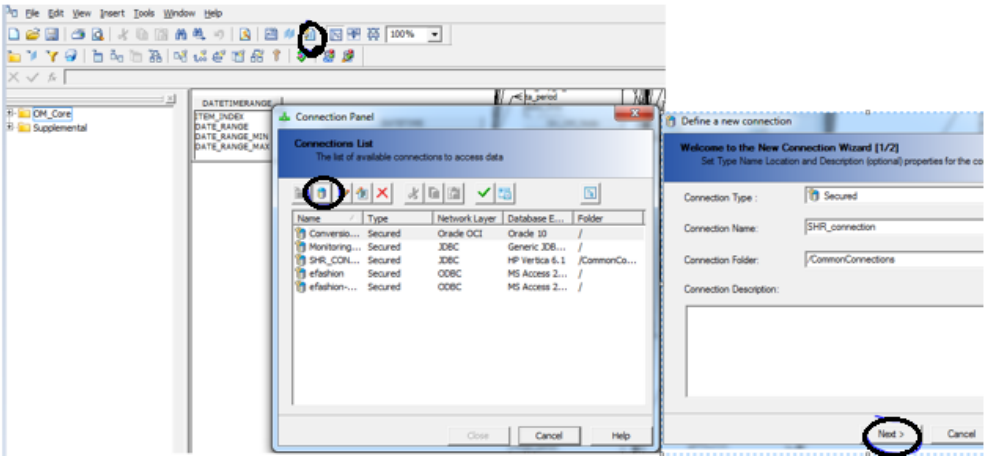
   ```
   java -jar upgrademanagementtool.jar -mode biartolive -biarfile "<location of biarfile>/test.biar" -destination <destination system>:6400 -destinationusername "Administrator" -destinationpassword "<password>" -logfile "/opt/log.txt"
   ```

After completing the Upgrade Management Tool steps, perform these steps to import universe:

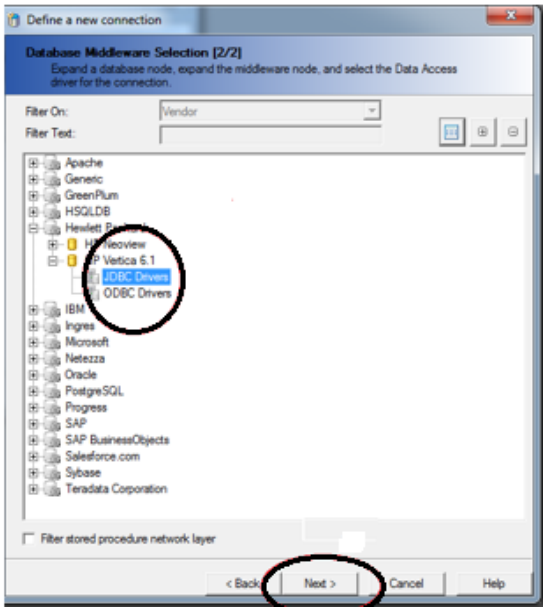
1. In **Search**, type Universe Design Tool.
2. Log on to Universe Design Tool (UDT). Type the SAP BusinessObjects 4.1 system details, where the BIAR is migrated from the previous steps and click **Ok**.



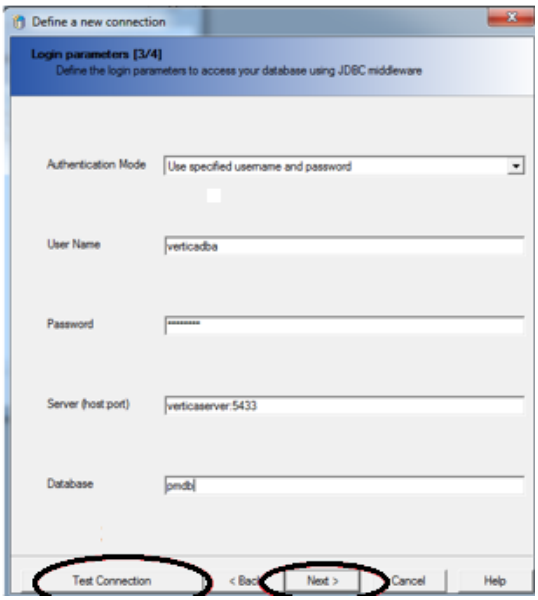
3. Click **Connections** icon to create a Vertica connection. In Define a new connection page, click **Next**.



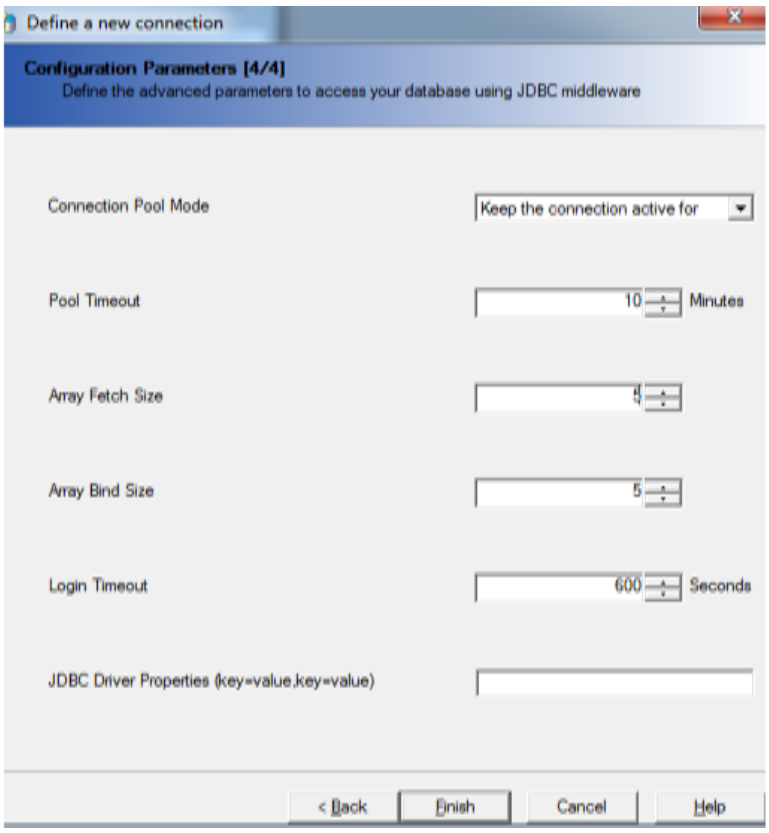
4. Click **Hewlett Packard > Vertica 6.1 > JDBC Drivers**. Click **Next**.



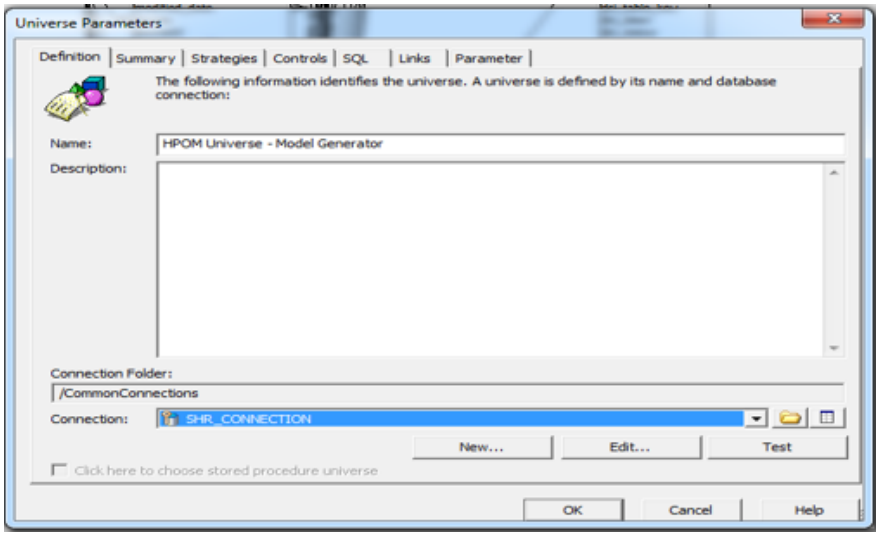
5. Click **Test Connection** to verify the connection and then click **Next**.



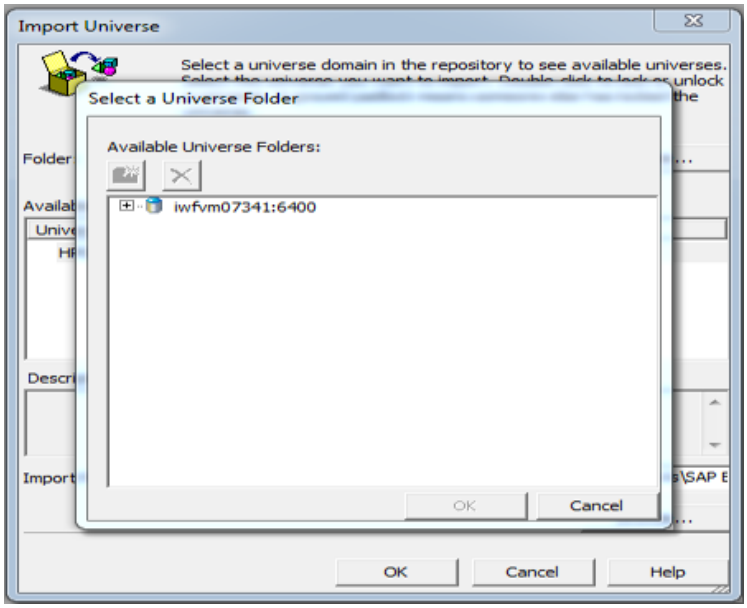
6. Click **Finish**. A connection is created with Vertica as database.



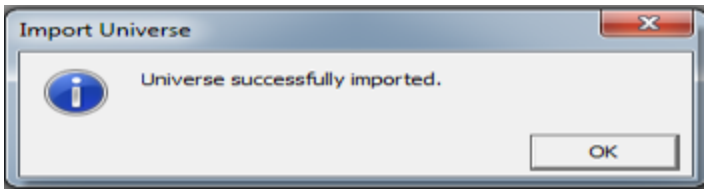
7. Go to **File > New > Parameters > Definition** tab.
8. Select the connection created in the previous step and click **Test**. Click **OK**.



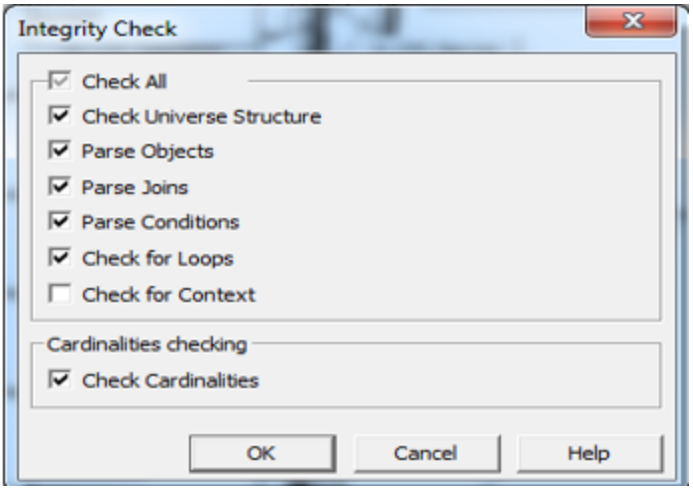
9. Go to the **File > Import**.
10. Click **Browse**. Select the Universe from Repository and click **OK**



11. The following message appears. Click **OK**.



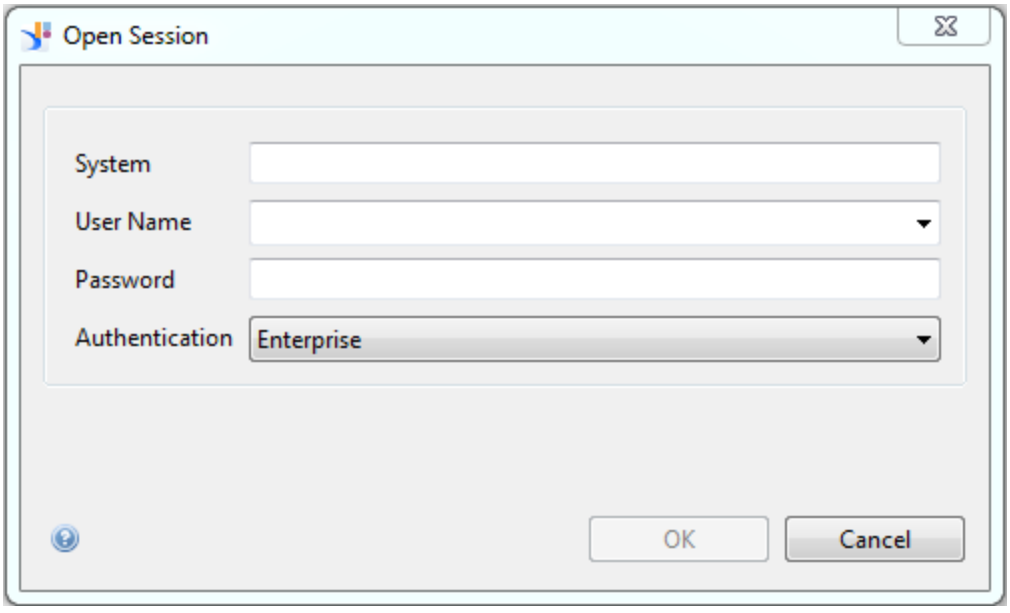
12. Click **Tools > Check Integrity** to verify any issues.



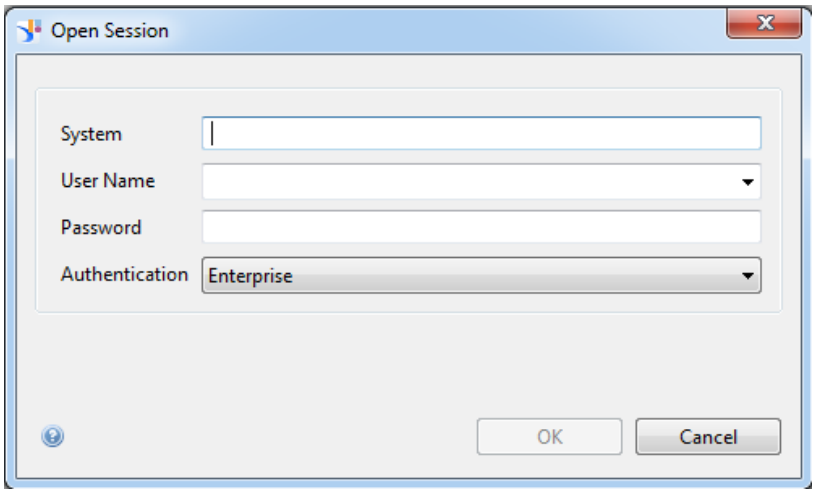
13. Click **File > Export to Repository this Universe**.

Convert unv to unx

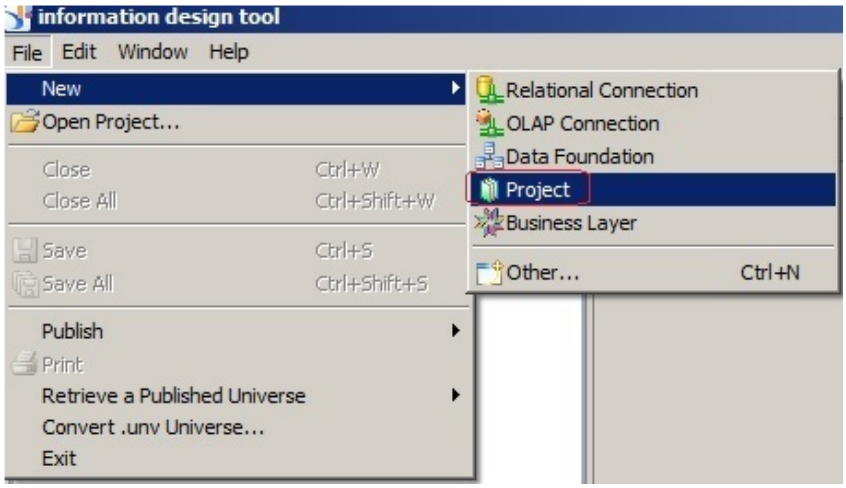
1. In **Search**, type Information Design Tool. Log on to Information Design Tool (IDT) and Click **OK**.



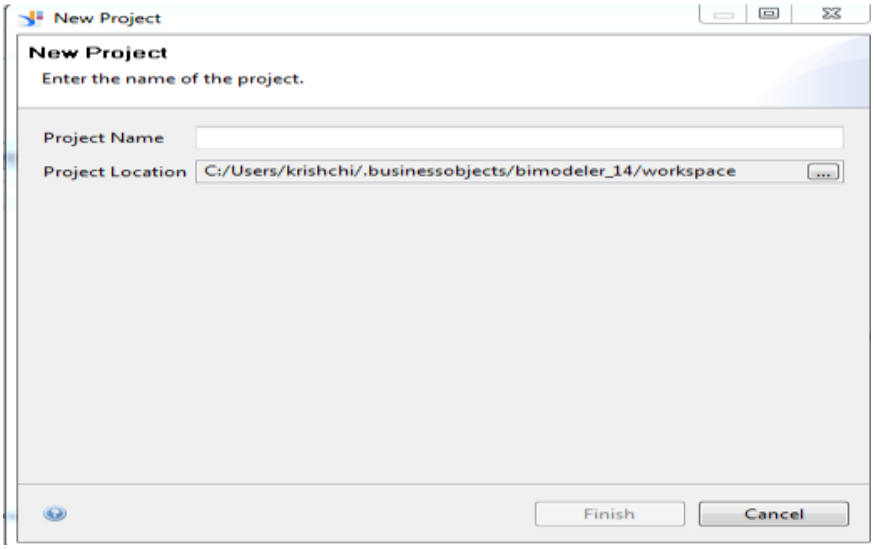
2. In IDT > Repository Resources, click **+** and insert Session. Type the system details that was provided in the previous step.



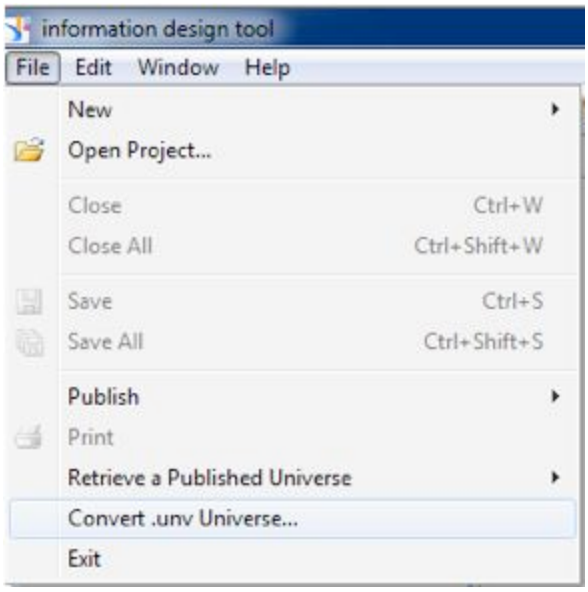
3. Click **File > New > Project**.



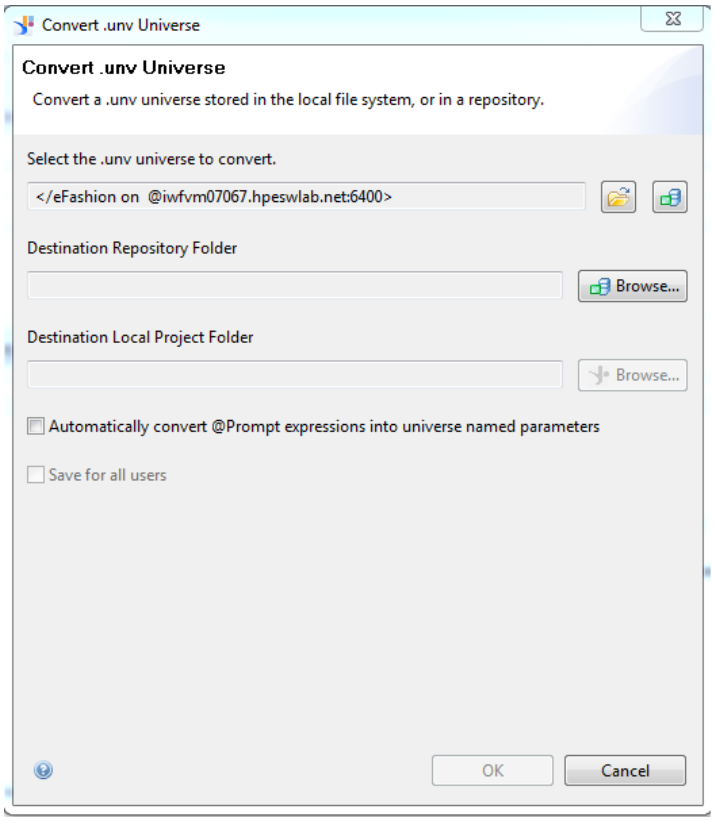
4. Type the project name to save the unx in the local system with the same name. Click **Finish**.



5. Click **File > Convert .unv Universe...**. The Convert .unv Universe page appears.



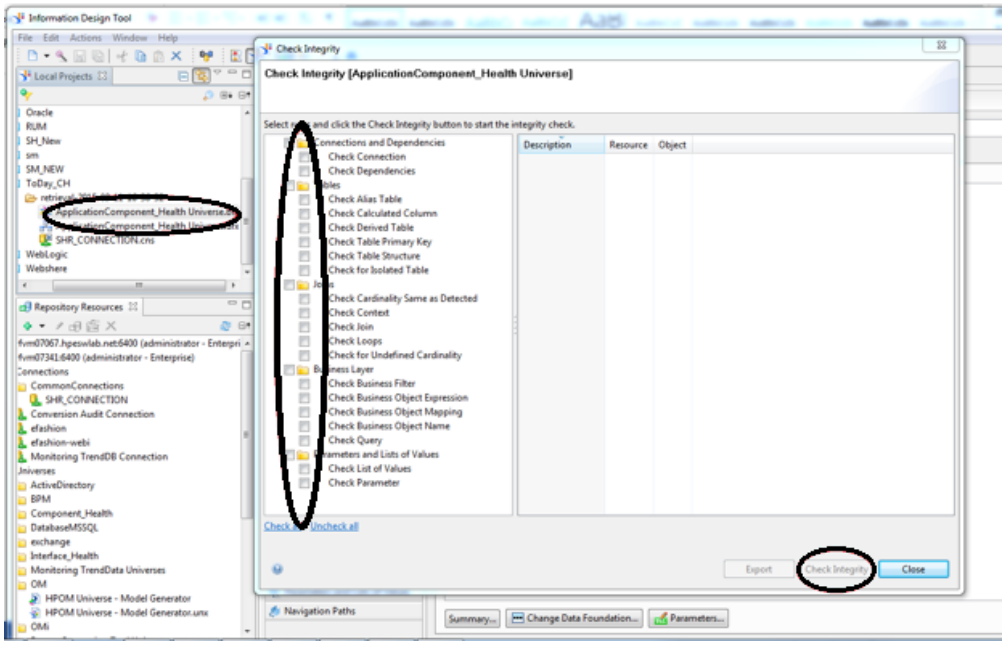
6. Select the universe that has to converted to unx. Select **Automatically Convert @Prompt into universe named parameters** and **Save for all users** check-box.



Now we will see 3 files created under the project which we created

a. `<Universename.blx>`
b. `<Universename.dfx>`
c. `<Connection.cns>`

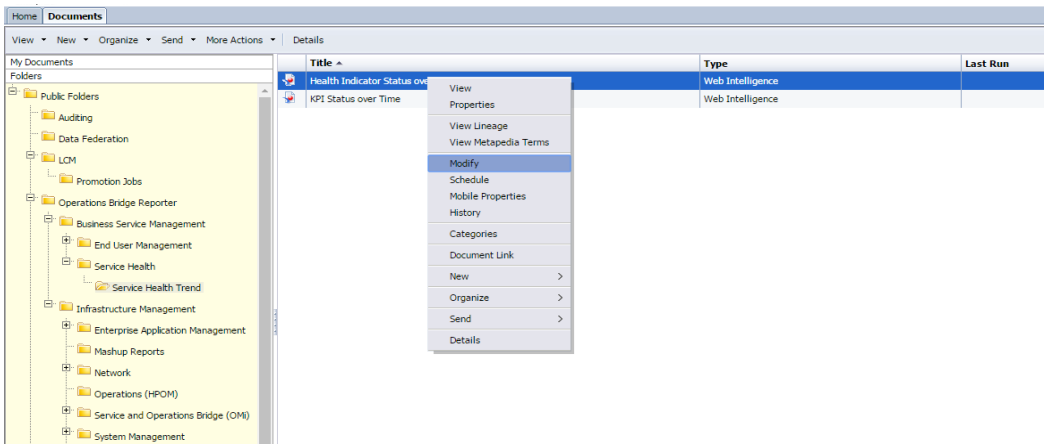
7. In the IDT left pane, right-click **<Universename.blx>**. Select all options and click **Check Integrity**.



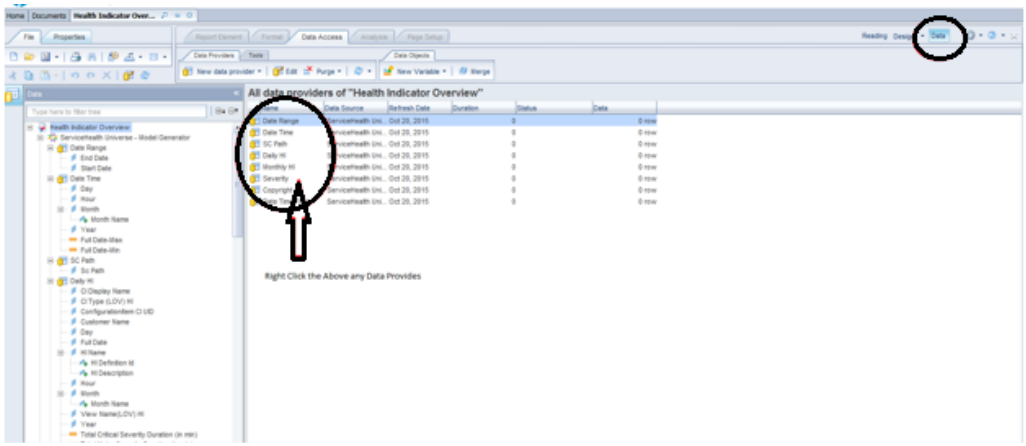
Publish to Repository. This step ensures that unv is successfully converted to unx.

Use Remapping Tool

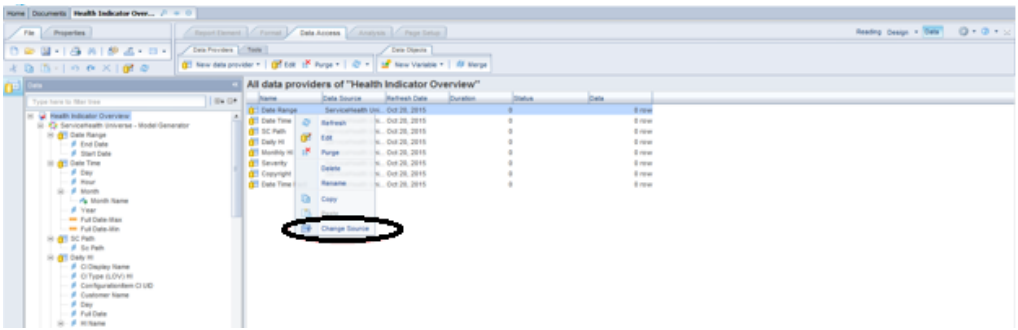
1. Log on to SAP BusinessObjects BI Launch pad from the link:
   `http://<servername>:8080/BOE/BI`
2. Click **Documents**. Click **Folder** that has the reports to be mapped. Right-click on the report and click **Modify**.



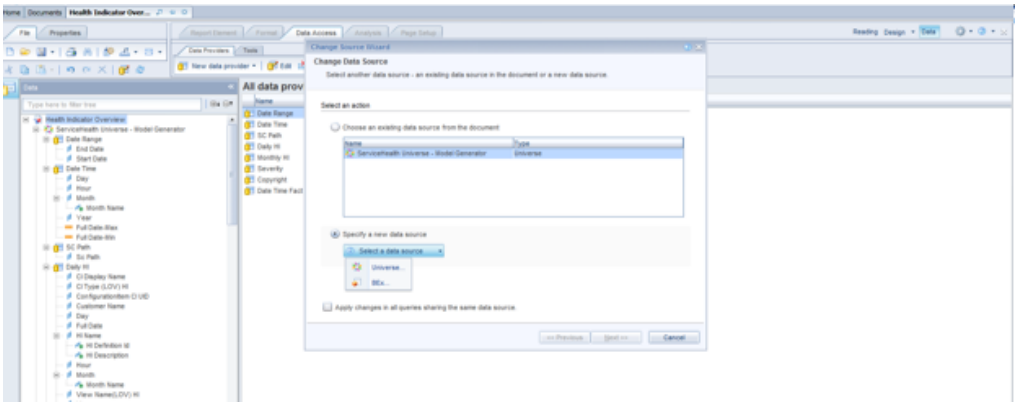
3. Click **Data**. The list of data providers appears.



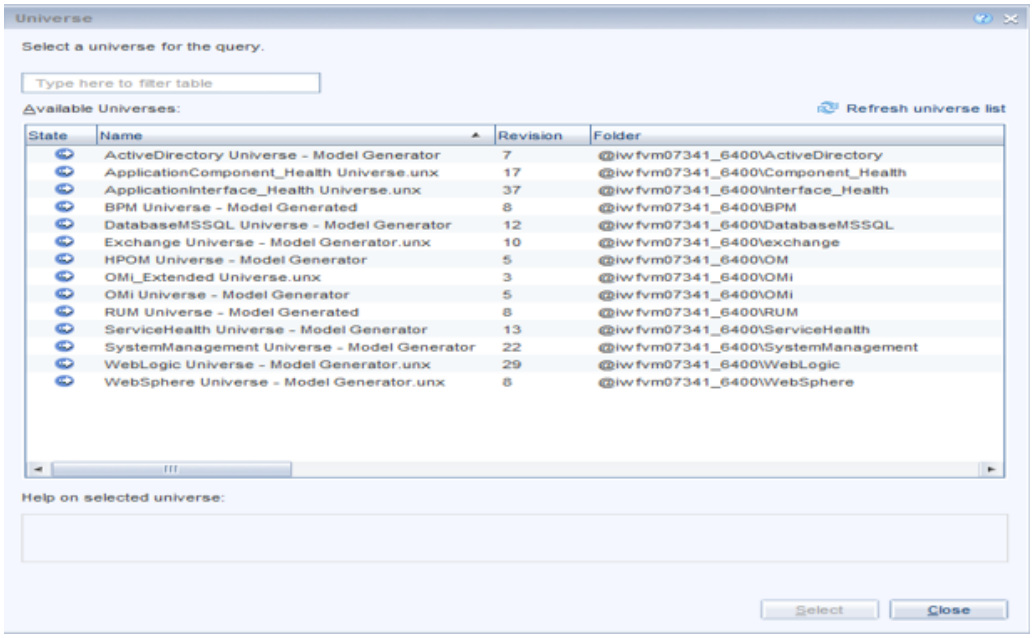
4. Right-click on the first data providers list and click **Change Sources**.



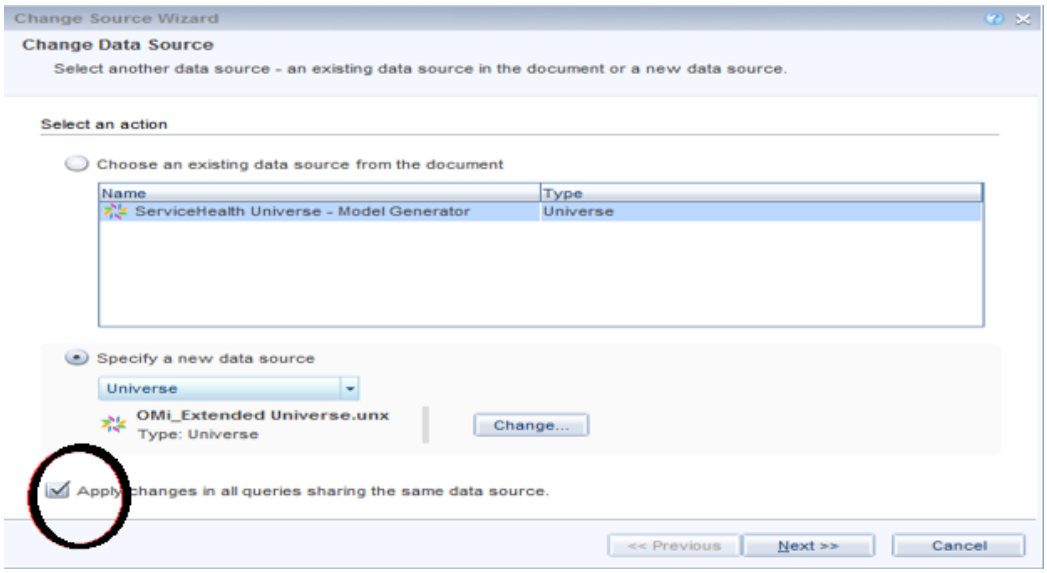
5. Select the Universe (UNX) and click **Next**.



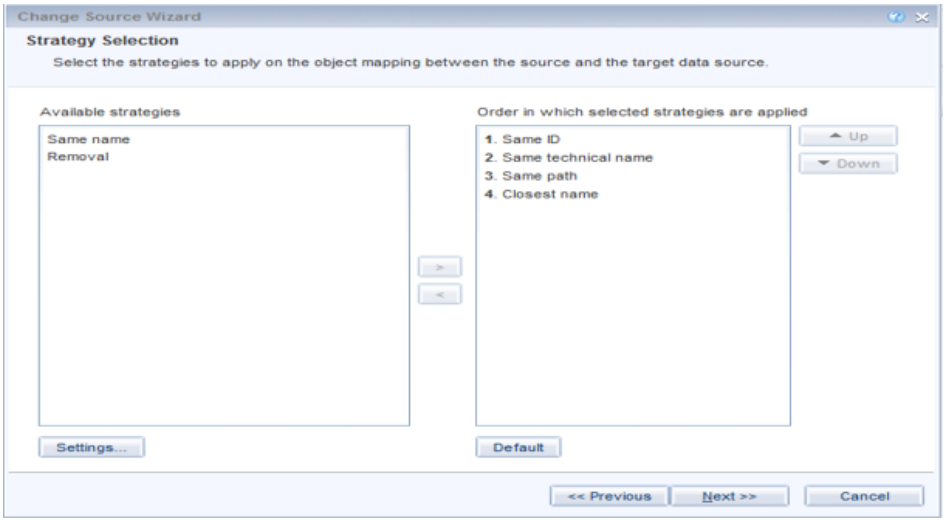
6. Select the Universe that is converted to unx in the previous task and click **Select**.



7. Select the Apply changes in all queries sharing the same data source check-box. Click **Next**.



8. In Strategy Selection, verify if the objects are mapped and click **Next** and **Finish**.



This will ensure that the reports are mapped to the converted UNX. After converting the reports and universe, take an "LCM BIAR " below.

LCM BIAR

Follow these steps on the OBR 10.22 system to take an LCM BIAR:

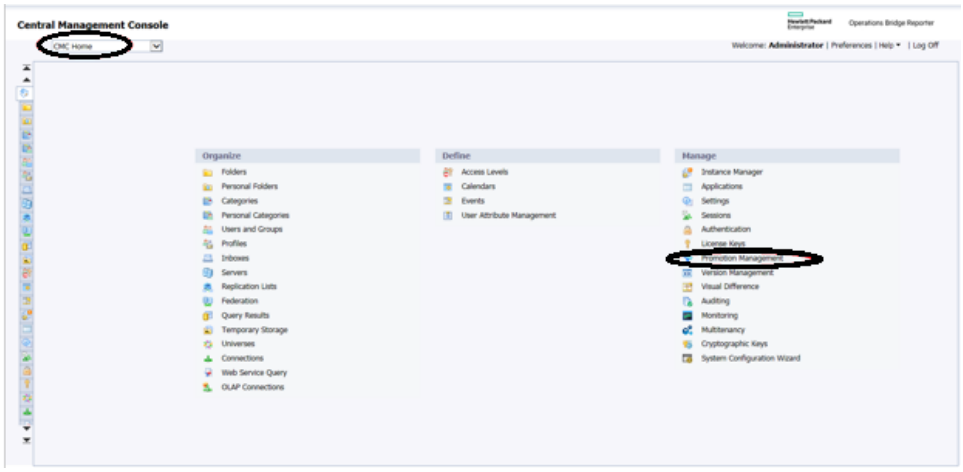
1. Log on to Central Management Console (CMC) as administrator from the following URL:

   `http://<servername>:8080/CMC`

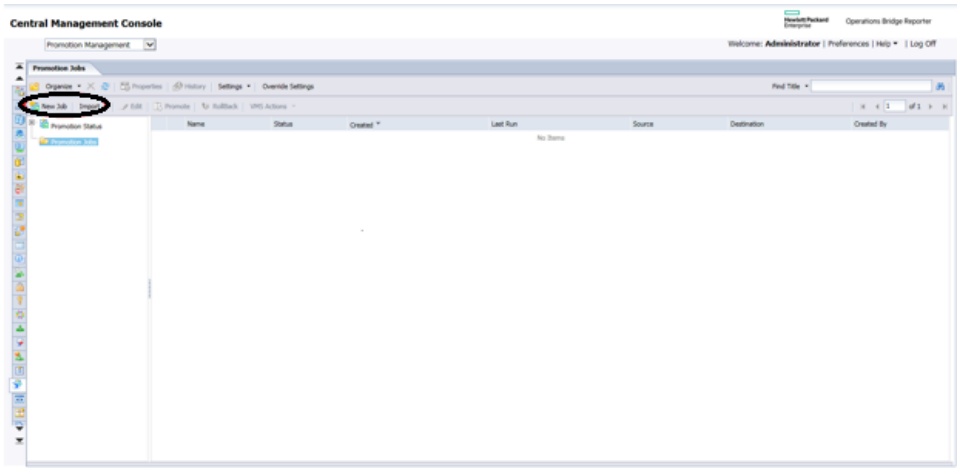
   You can log on to CMC from the Administration Console, click **Administration > SAP BOBJ** and then click **Launch CMC**.

   The CMC Home page appears.

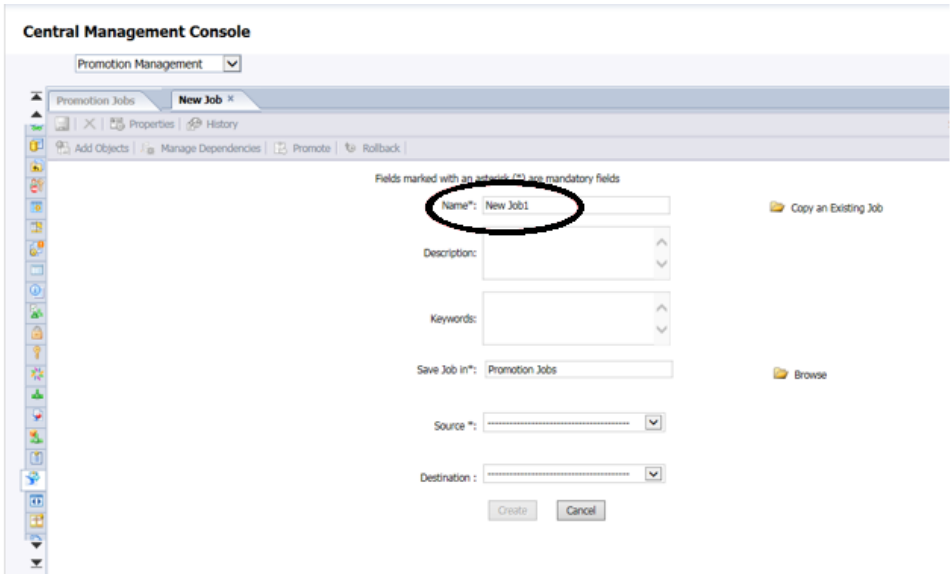
2. Click **Promotion Management**.



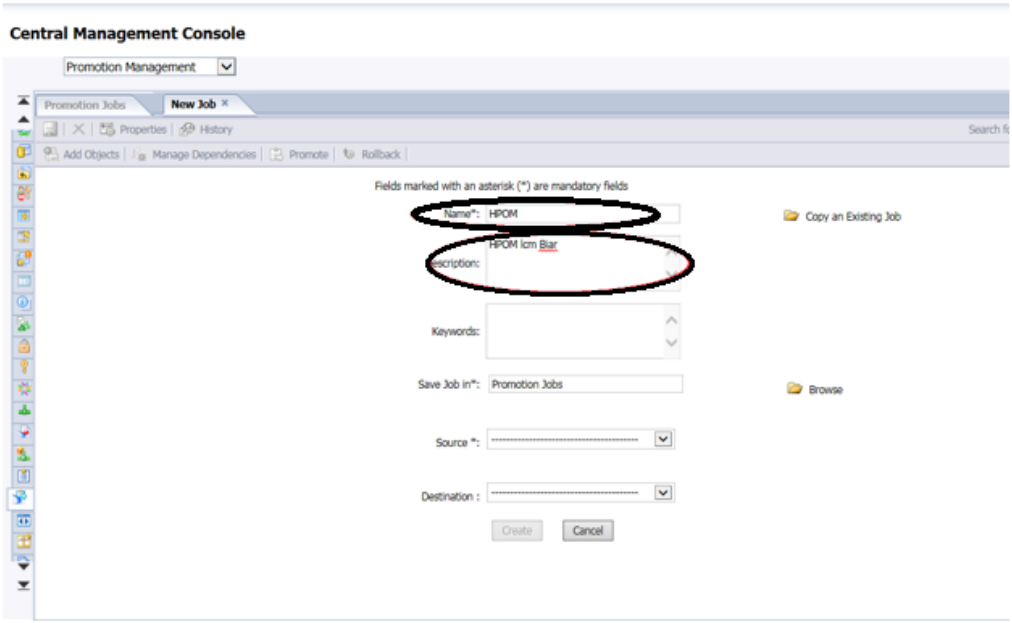
3. Click **New Job** to create a job.



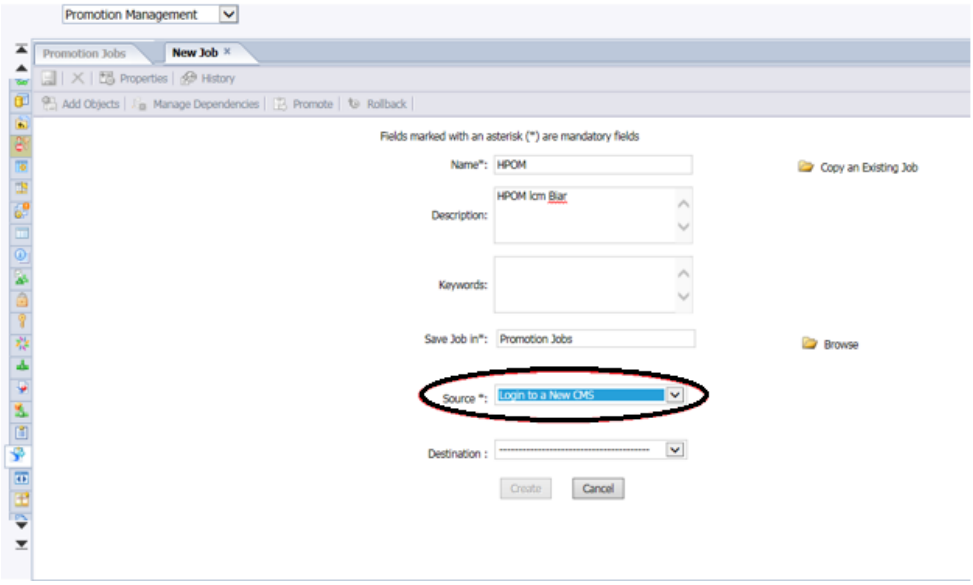
4. Type the job name in **Name** as per your content. You can type the description if required.



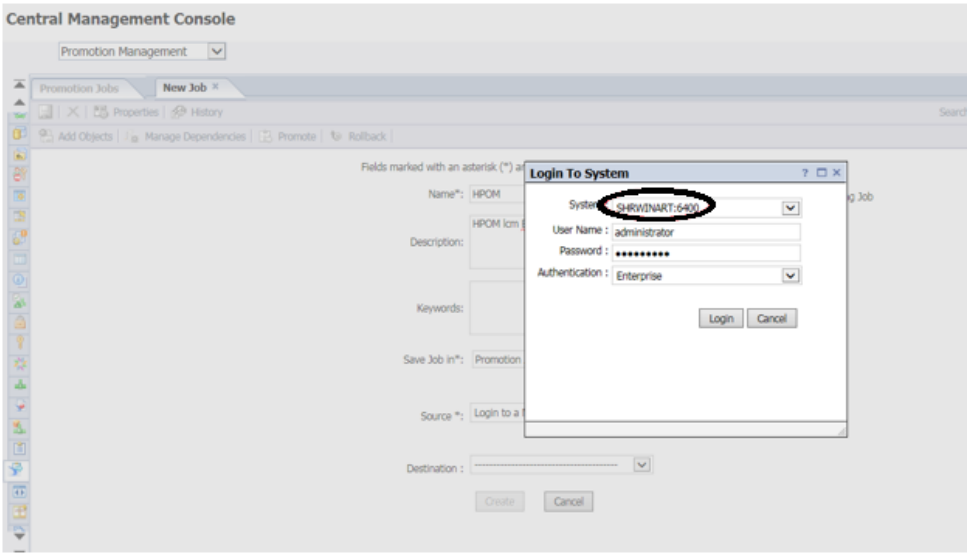
For Example:



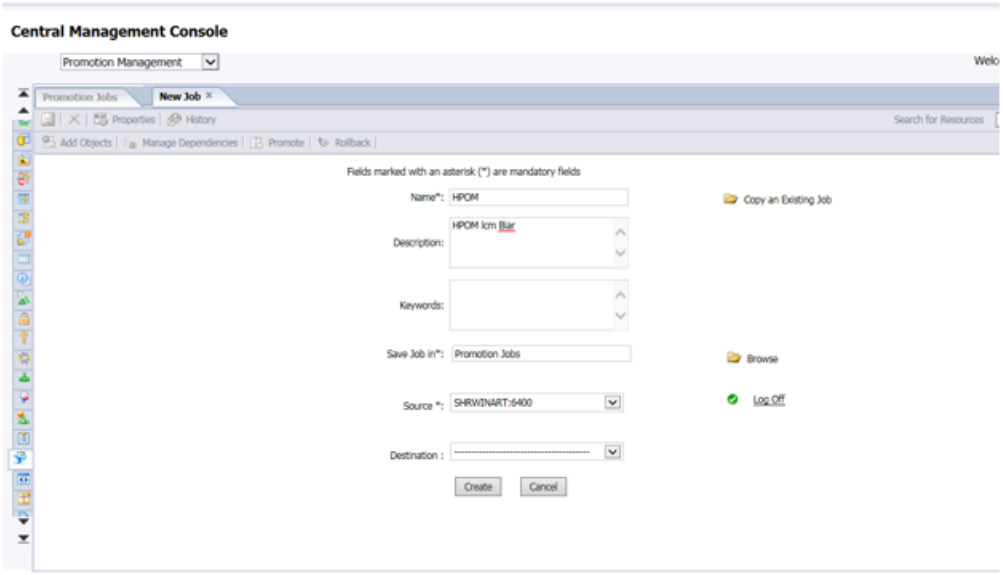
5. From **Source**, select **Login to a New CMS**.



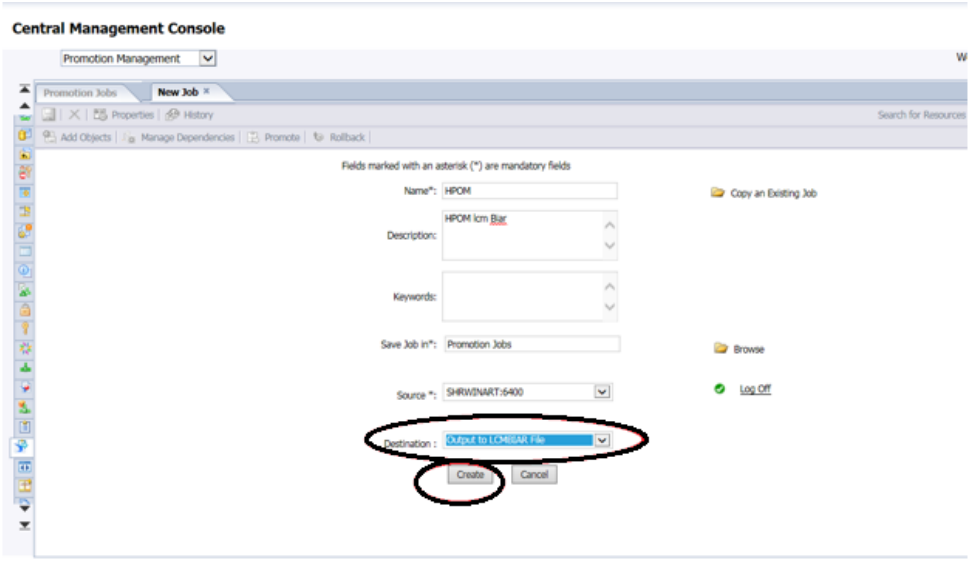
6. Type the source system details where SAP BusinessObjects reports and universes exist and click **Login**.



The source details appears in the **Source** field.

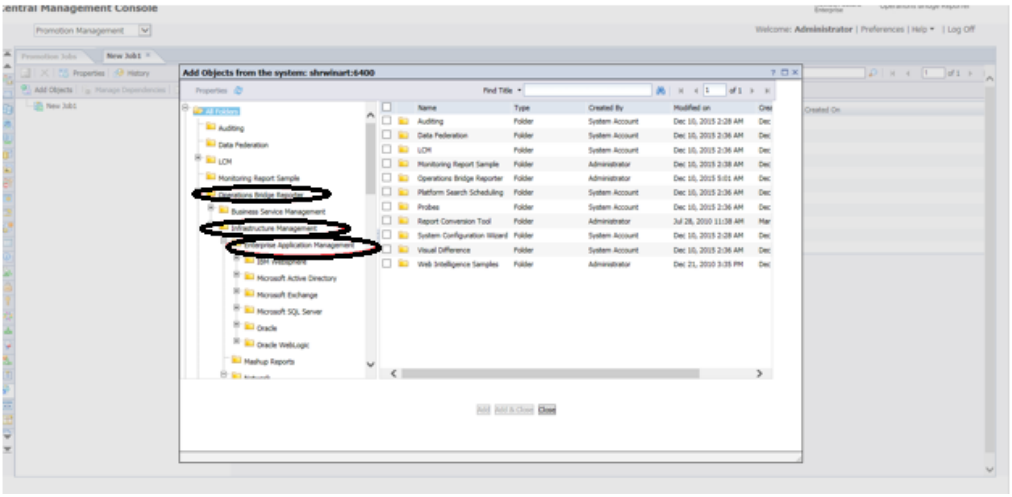


7. From **Destination**, select the **Output to LCMBIAR File** option. Click **Create**.

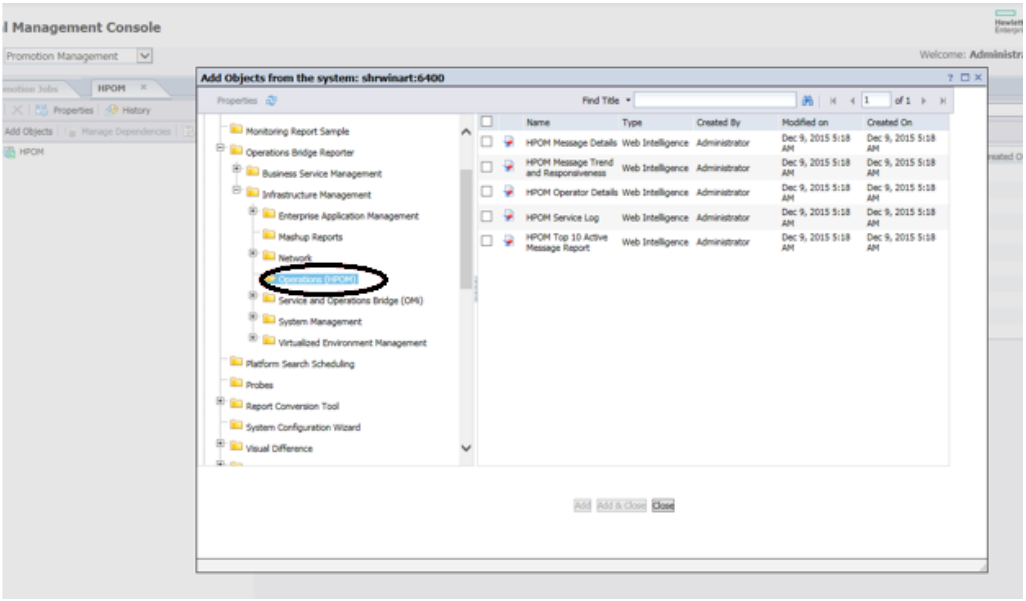


8. From the left pane, select the Reports from the folders.

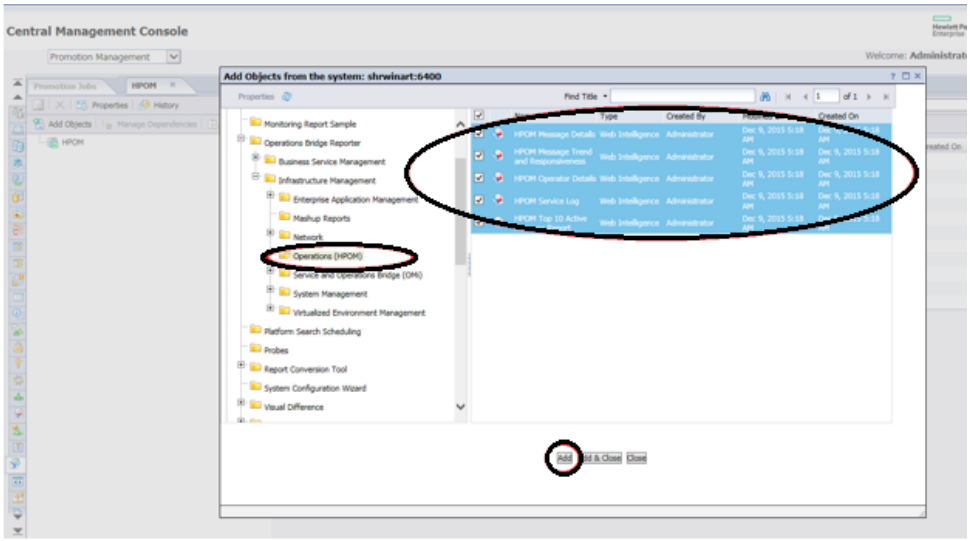
   For example: The following image displays selections from Operations Bridge Reporter folder:



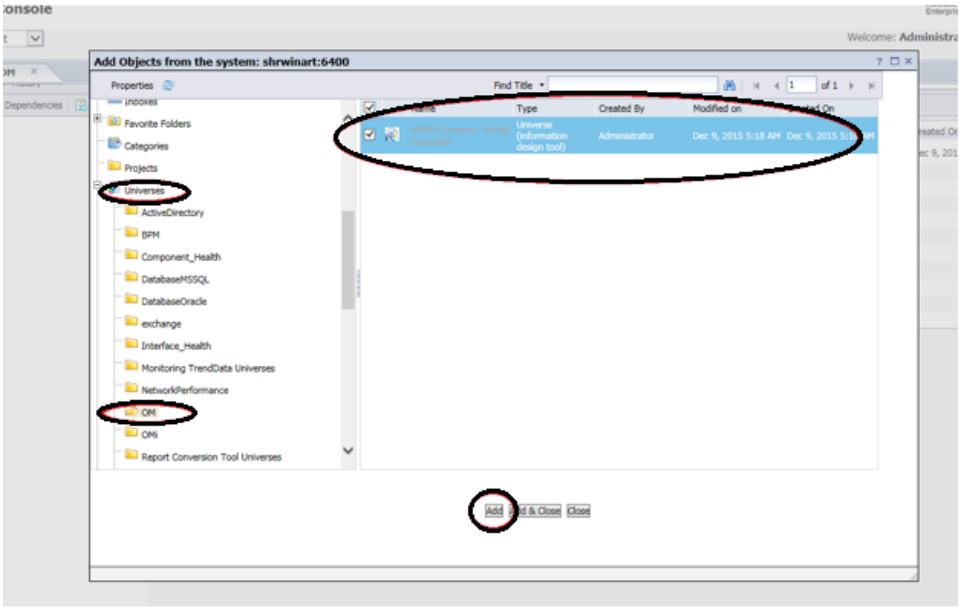
9. Click the folder where the reports available to be migrated.



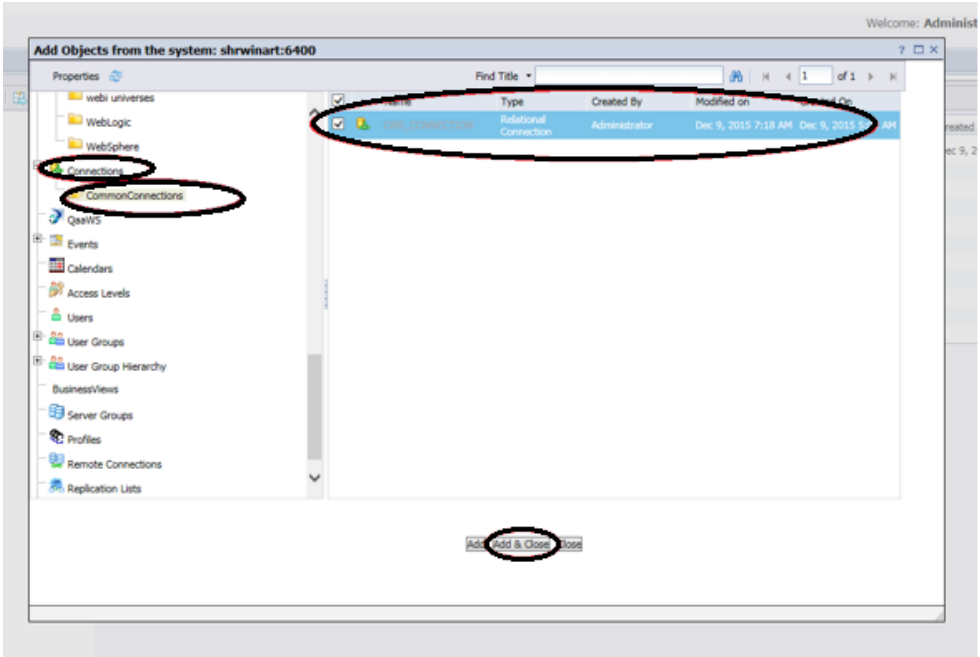
10. Select the Reports and click **Add**.



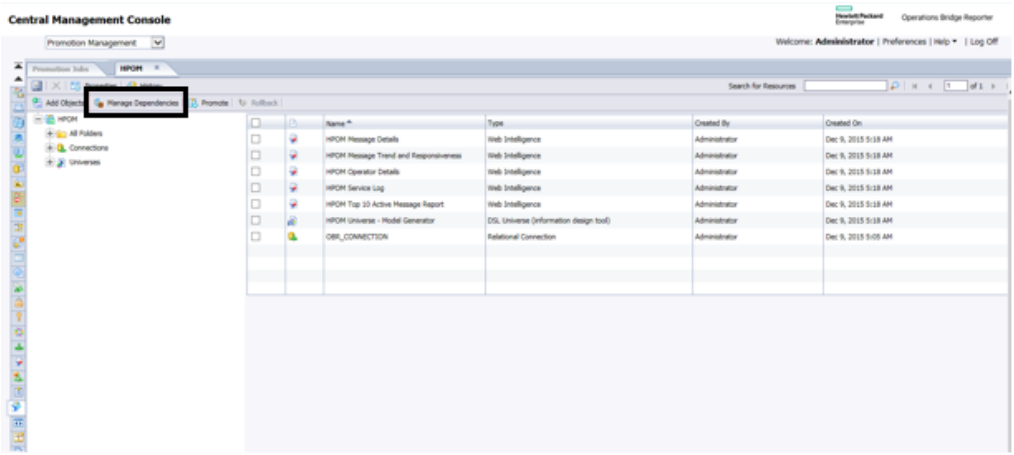
11. In the left pane, scroll down and click on the universe. Select the universe and then click **Add**.



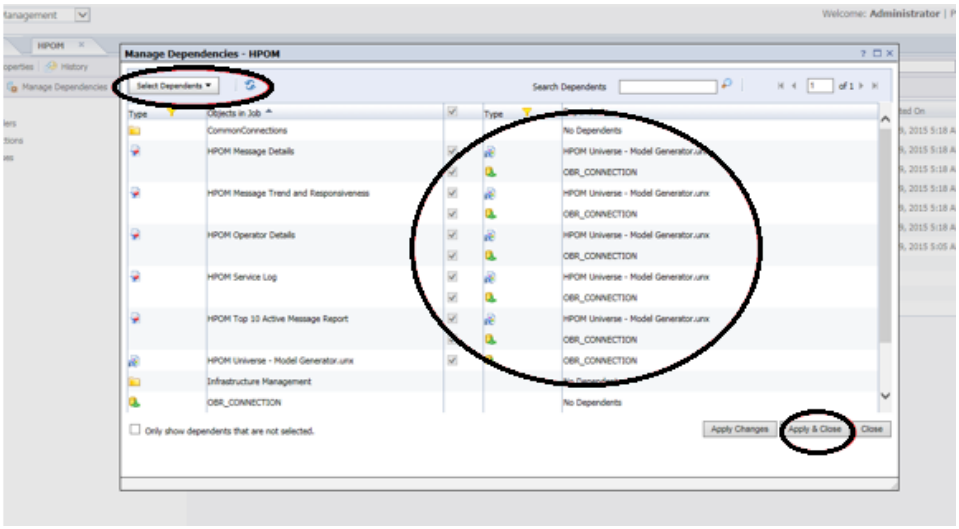
12. In the left pane, scroll down and click on the Connection used for the universe. Select the connection and then click **Add & Close**.



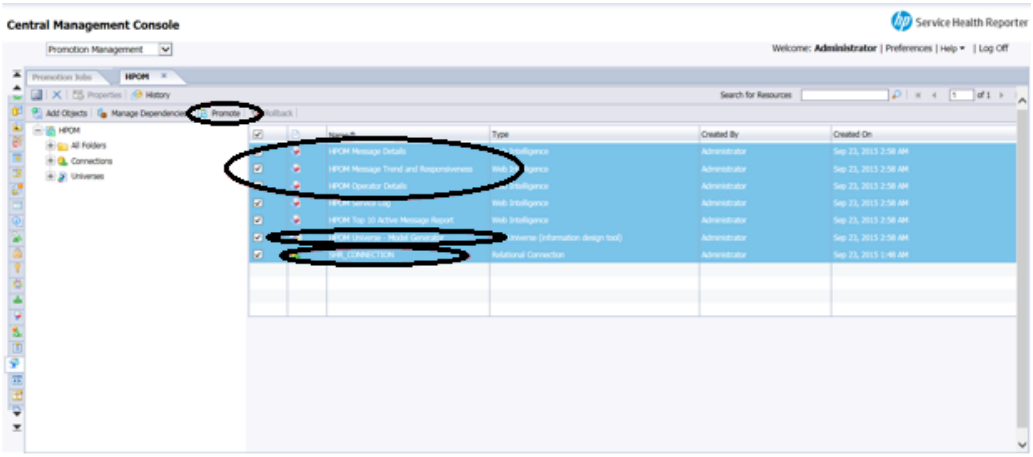
13. Click **Manage Dependencies** to check the reports, universe and connection.



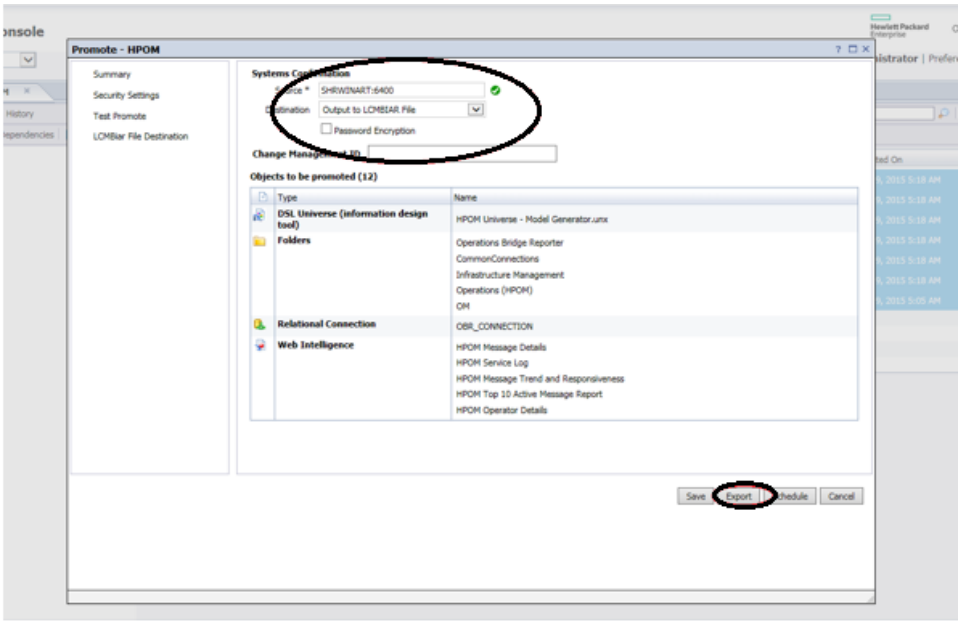
Click **Select Dependents** to check the dependencies, this dependency check will automatically add the dependents here. Click on **Apply & Close**.



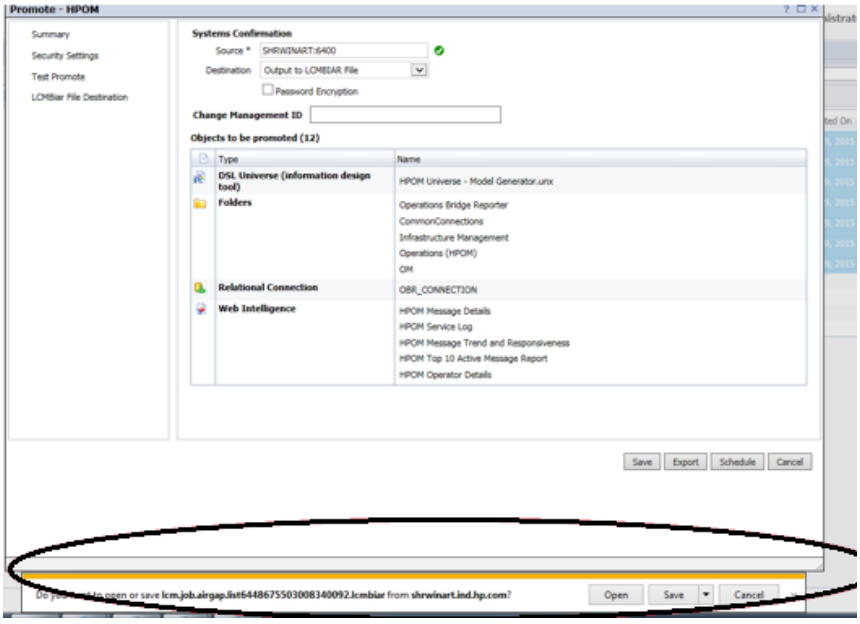
14. Select all the objects (reports, universe and connection) and click **Promote**.



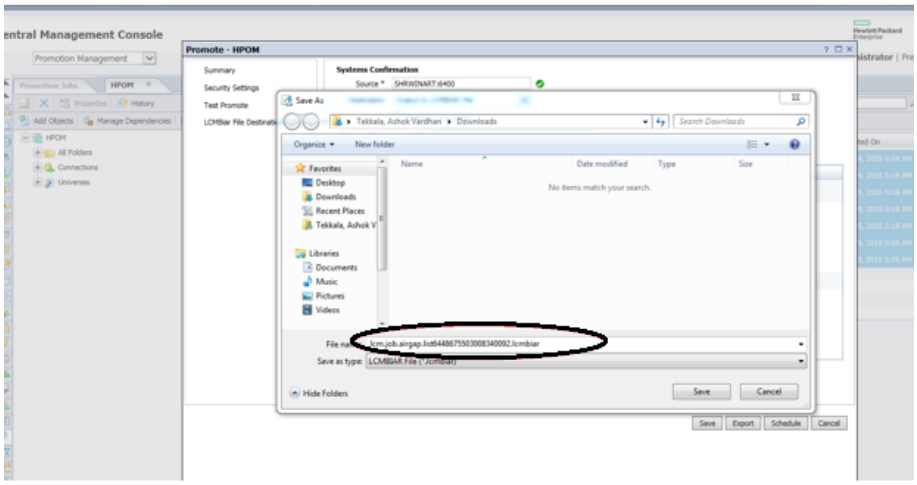
15. Verify **Source** and **Destination** and **Objects to be promoted**. Click **Export**.

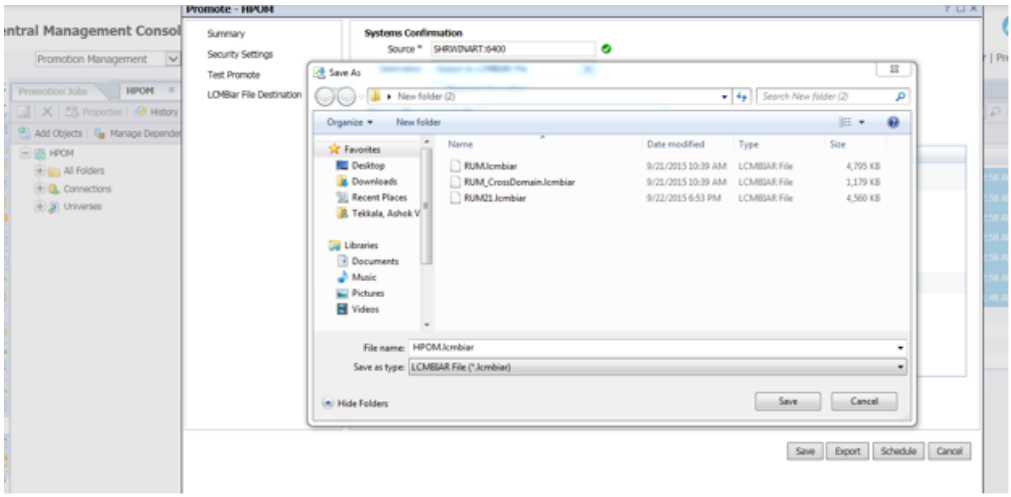


16. Save the exported objects LCM BIAR to Local folder.



17. Rename the File and Save


Promote - HPOM
Summary
Security Settings
Test Promote
LCMBiar File Destination
Systems Confirmation
Source * SHRWINART:6400
Save As
Organize
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Name
Date modified
Type
Size
No items match your search.
Hide Folders
Save
Cancel
Export
Schedule


Promote - HPOM
Summary
Security Settings
Test Promote
LCMBiar File Destination
Systems Confirmation
Source * SHRWINART:6400
Save As
New folder (2)
Organize
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Name
Date modified
Type
Size
RUM.lcmbiar
RUM_CrossDomain.lcmbiar
RUM21.lcmbiar
File name: HPOM.lcmbiar
Save as type: LCMBIAR File (*.lcmbiar)
Hide Folders
Save
Cancel
Export
Schedule

Troubleshooting Migration Issues

This section covers the common problems that you may encounter during migrating data from SHR 9.3x/9.4x to OBR 10.22 and provide steps to troubleshoot them. Each problem is documented with a symptom, the description about the symptom and resolution for the symptom.

Symptom:	**Export Failing with Out of Memory Error**
Description:	This error occurs when the export option is run on the SHR 9.3x/9.4x system if there is no sufficient memory for export.
Resolution:	Perform the following steps to resolve this issue: 1. On the SHR 9.3x/9.4x system, go to the location `{PMDB_HOME}/config/startup`. 2. Open the `migrationUtility.ini` file. 3. Edit the parameter as follows: `jargs=-DBSMR_HOME={bsmr.home} -Dbsmr.home={bsmr.home} -DDPIPE_HOME={bsmr.home} -Dpmdb.home={bsmr.home} -Xms120M` **`-Xmx2048M`** `jargs=-DBSMR_HOME={bsmr.home} -Dbsmr.home={bsmr.home} -DDPIPE_HOME={bsmr.home} -Dpmdb.home={bsmr.home} -Xms120M` **`-Xmx3000M`**

Symptom:	**After import on OBR 10.22 system, collection is not complete for all days**
Description:	The collection is based on `collector.maxHistory` property in `config.prp` file. By default it is 360 hours. If the migration (import) has taken more time than 360 hours then the collection for the additional days will not happen.
Resolution:	Perform the following steps on OBR 10.22 system to resolve this issue: 1. Go to the location `{PMDB_HOME}/data`. 2. Open the `config.prp` file. 3. Edit the value for `collector.maxHistory` with the number of hours for the migration (import) to complete. For Example: If the migration (import) takes 16 days to complete, edit the parameter as follows: `collector.maxHistory=384`

Send documentation feedback

If you have comments about this document, you can contact the documentation team by email. If an email client is configured on this system, click the link above and an email window opens with the following information in the subject line:

Feedback on Migration Guide (Operations Bridge Reporter 10.22)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to docfeedback@hpe.com.

We appreciate your feedback!