

Project and Portfolio Management Center

Software Version: 12.2.3

Object Migrator Guide and Reference

Go to HELP CENTER ONLINE https://admhelp.microfocus.com/ppm/

Document Release Date: June 2021 | Software Release Date: June 2021

Legal Notices

© Copyright 1997-2023 Micro Focus or one of its affiliates.

Warranty

The only warranties for products and services of Micro Focus and its affiliates and licensors ("Micro Focus") are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Micro Focus shall not be liable for technical or editorial errors or omissions contained herein. The information contained herein is subject to change without notice.

Restricted Rights Legend

Contains Confidential Information. Except as specifically indicated otherwise, a valid license is required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Disclaimer

Certain versions of software and/or documents ("Material") accessible here may contain branding from Hewlett-Packard Company (now HP Inc.) and Hewlett Packard Enterprise Company. As of September 1, 2017, the Material is now offered by Micro Focus, a separately owned and operated company. Any reference to the HP and Hewlett Packard Enterprise/HPE marks is historical in nature, and the HP and Hewlett Packard Enterprise/HPE marks are the property of their respective owners.

Contents

Getting Started with Object Migrator	7
Getting Started Overview	7
New Features Overview	
Architecture Overview	8
Example Object Migrator Environment	
Object Migrator Concurrent Programs	
Deploying Objects Across Database Instances	
Migration Capabilities	13
Version Control Overview	13
Reports Overview	14
Comparison Reports	15
Migration Audit Reports	
Installation and Upgrade Requirements	
Considerations for Version 12.2.3	
Upgrade Requirements	
File System and Tablespace Requirements	
Platform Requirements	
Instance Requirements	
Distributed Database Option - Recommended	
Application Naming Requirements	
Version Control Considerations	
Sizing Requirements for Object Archive Tables	
Obtaining a User Name and Password	
Installing and Configuring Object Migrator	
Pre-Installation Setup	
Registering Object Migrator as a custom application	
Creating Tablespaces and Rollbacks	
Granting more privileges to the CLM user	
Installing Object Migrator	
Configuring Your System to Work with Object Migrator	27
Creating and Registering Database Links	
Adding Object Migrator Concurrent Programs	
Running the Maintain Object Migrator Views program	
Validating Installation	
Registering Custom Applications	
Preparing Patch File System	34
KUpgrading Object Migrator	

Optional Configurations for Object Migrator Setting Up a Separate Responsibility for Migrations Setting Up an Unrestricted Migrator Using Object Migrator Without the Distributed Database Option	
Migrating and Comparing Objects	47
Running the Object Migrator Request	
Viewing the Migration Results	50
Auditing Migration Executions	52
Comparing Objects	53
Running the Object Comparison	54
Sample Comparison Report	
Maintaining Object Migrator	
Maintaining Database Links	57
Maintaining Value Sets	
Maintaining Object Migrator Views	
Using Object Migrator Custom Views	
Switching to Non-Validated Mode	60
open_links Database Parameter	61
Managing Custom Applications	61
Purging the Object Migrator Interface Tables	62
Purging the Object Migrator Archive Details	64
Recompiling the Descriptive Flexfields	65
Maintaining the Data Model	65
Setting Up Object Migrator Security	
Managing Database Instances	
Adding a New Database Instance	
Removing a Database Instance	66
Using Version Control	68
Archiving AOL Object Definitions	68
Saving an Object to the Object Archive	68
Retrieving an Object from the Object Archive	69
Running the Object Archive Version Detail Report	69
Purging the Object Archive	
Using Object Migrator with PPM Deployment Management	
Using Object Migrator with PPM Deployment Management Overview	74
Running Object Migrator from PPM Deployment Management	74
Processing Packages in PPM Deployment Management	76

Appendix 2: AOL-Dependent Objects	
Appendix 2: Migration Rules and Parameters	
Common Migrator Parameters	
Concurrent Managers	
Before Migrating Concurrent Managers	
Concurrent Managers Migrator Parameters	
Concurrent Programs	
Before Migrating Concurrent Programs	
Concurrent Programs Migrator Parameters	
Descriptive Flexfields	
Before Migrating Descriptive Flexfields	
Descriptive Flexfields Migrator Parameters	
Folders	
Before Migrating Folders	
Folders Migrator Parameters	
FSG Row/Column Sets	
Before Migrating FSG Row/Column Sets	
FSG Row/Column Sets Migrator Parameters	
Functions	
Before Migrating Functions	
Functions Migrator Parameters	
GUI Menus	
Before Migrating GUI Menus	
GUI Menus Migrator Parameters	
Messages	
Before Migrating Messages	
Messages Migrator Parameters	
Printer Definitions	
Before Migrating Printer Definitions	
Printer Definitions Migrator Parameters	
Profile Options	
Before Migrating Profile Options	
Profile Options Migrator Parameters	
QuickCodes (AOL)	
Before Migrating QuickCode	
QuickCodes Migrator Parameters	
Request Groups (Report Groups)	
Before Migrating Request Groups	
Request Groups Migrator Parameters	
Request Sets (Report Sets)	
Berore Migrating Request Sets	
Request Sets Migrator Parameters	

Responsibilities	
Before Migrating Responsibilities	
Responsibilities Migrator Parameters	
Users	
Before Migrating Users	
Users Migrator Parameters	
Value Sets	117
Before Migrating Value Sets	117
Value Sets Migrator Parameters	
Appendix 2: Exception Messages	
Send Us Feedback	

Getting Started with Object Migrator

- "Getting Started Overview" below
- "New Features Overview" on the next page
- "Architecture Overview" on the next page
- "Object Migrator Concurrent Programs" on page 10
- "Deploying Objects Across Database Instances" on page 12
- "Migration Capabilities" on page 13
- "Version Control Overview" on page 13
- "Reports Overview" on page 14

Getting Started Overview

When business processes change, Oracle® E-Business Suite customers often have to reconfigure their systems to accommodate the change. Application Object Library (AOL) configuration changes often result from such business process changes and, without Object Migrator, AOL configuration changes typically have to be done manually.

Every Oracle E-Business Suite customer (regardless of whether they are currently implementing, upgrading, or maintaining Oracle E-Business Suite) has the challenge of configuring AOL objects to meet its needs. As each object is configured, the object must be migrated to the multiple environments (Development, QA, Staging, Production) the customer uses to manage its E-Business Suite implementation.

Object Migrator can help you:

• Automate setup and deployment

Each AOL setup deployment does not require the re-keying of the setup information—a complex, repetitive, and error prone manual task requiring hours of database administrator, system administrator, and developer time.

• Run diagnostic reports to verify proper migration and identify any errors

Identifying if a migration was successful requires manual verification, as does fixing an improper migration. With Object Migrator, comparison reports list the differences between objects in different environments, and validations minimize errors.

Rollback improperly migrated objects

If an improper object is still migrated, Object Migrator's version control functionality enables the change to be automatically rolled back.

As business needs change or applications are patched or upgraded, AOL setups change and need to be deployed to affected instances. With Object Migrator you will know what has changed, what needs to change, and save hundreds of hours implementing and maintaining the AOL setups that support your critical business processes.

New Features Overview

Object Migrator version 12.2.3 includes the following enhancements:

- Supports Oracle E-Business Suite (EBS) 12.2 Release Update Packs 12.2.9 and 12.2.10.
- The Object Migrator version number can now be read from the clm_install_info table.

Architecture Overview

Object Migrator is a custom application installed on an Oracle E-Business Suite instance. Its default application short name is CLM, and its full application name is Object Migrator.

Object Migrator has its own database schema. This schema contains the Object Migrator database objects and communicates with the APPS schema. These are required in order to migrate Application Object Library (AOL) setup data, as well as retain archived versions of objects and capture migration audit data.

Object Migrator programs are registered as concurrent programs. These programs utilize the standard security and concurrent processing features available within the Oracle E-Business Suite, such as concurrent program registrations, request groups, and responsibilities, to control their use.

Object Migrator has the flexibility to be installed on either the source or destination instance of data migrations, or on a completely independent instance. This is because it communicates with other instances using SQL*Net and database links created in the Object Migrator schema. The database links are defined to provide a link from the Object Migrator schema to the APPS schema of a given instance. If Object Migrator is installed in an instance that is the source or destination of a migration, the Object Migrator schema will contain a database link pointing to the APPS schema of the local database.

The following shows the relationship between the Object Migrator schema, APPS, source, and destination databases.

Figure 1-1. Object Migrator architecture

Object Migrator Guide and Reference Getting Started with Object Migrator



Example Object Migrator Environment

The following Object Migrator environment has four database instances named STAGE, DVLP, PILOT, and PROD. STAGE is a small staging database that only has Application Object Library installed and is never refreshed.



Object Migrator Concurrent Programs

Object Migrator installs several report files that are run as concurrent programs from the Submit Requests form. Oracle reports files have rdf file extensions. There is one report file for each of the Object Migrator modules. Some Object Migrator modules are not applicable to all Oracle E-Business Suite releases.

Each object type that is supported for migration has a separate concurrent program. There are also separate concurrent programs for administration tasks. Each of the concurrent programs included with Object Migrator is included in the following table.

Concurrent Program Name	Report Name	Notes
Object Migrator Audit Report	CLMRMAD1.rdf	
Maintain Object Migrator Views	CLMRDVW1.rdf	
Migrate Concurrent Managers	CLMRMCM1.rdf	When migrating to an Oracle E-Business Suite Release 12 destination, the Concurrent Programs migrator submits the following concurrent requests:
		Build Concurrent Request Queue ViewVerify
		Oracle has added FAILOVER_ MAX and FAILOVER_MIN columns. Those columns and any data in them is migrated with this migrator.
Migrate Concurrent Programs	CLMRMCP1.rdf	Supports migrations of multiple organization category functionality.
Migrate Descriptive Flexfields	CLMRMDF1.rdf	Supports the synchronize reference field functionality.
Migrate Folders	CLMRMFD1.rdf	Supports behavior mode functionality.

Table 1-1. Object Migrator Concurrent Program and Report Names

Concurrent Program Name	Report Name	Notes
Migrate FSG Row/Col Sets	CLMRMFS1.rdf	Supports migration from Release 11 to Release 11i, but not E-Business Suite Release 12.
Migrate Functions	CLMRMFN1.rdf	IREP columns are maintained by the Integration Repository. IREP columns are not moved by this migrator because they are necessary to the proper function of your database applications.
Migrate GUI Menus	CLMRMGM1.rdf	
Migrate Messages	CLMRMMS1.rdf	
Migrate Printer Definitions	CLMRMPT1.rdf	
Migrate Profile Options	CLMRMP01.rdf	Supports the hierarchy type access level for the server responsibility.
Migrate QuickCodes	CLMRMCL1.rdf	Supports a new column named ASSIGN_ LEAF_ONLY.
Migrate Report Groups	CLMRMRG1.rdf	
Migrate Report Sets	CLMRMRS1.rdf	
Migrate Responsibilities	CLMRMRP1.rdf	Supports migration of the mobile applications responsibilities.
Migrate Users	CLMRMUS1.rdf	
Migrate Value Sets	CLMRMVS1.rdf	
Migration Comparison Report	CLMRMMC1.rdf	

Table 1-1. Object Migrator Concurrent Program and Report Names, continued

Concurrent Program Name	Report Name	Notes
Object Archive Version Detail Report	CLMRMVR1.rdf	
Purge Object Archive Versions	CLMRDPV1.rdf	
Purge Object Migrator Interface Tables	CLMRDPG1.rdf	

Table 1-1. Object Migrator Concurrent Program and Report Names, continued

Deploying Objects Across Database Instances

Individual applications in the Oracle E-Business Suite rely on the configuration of common objects (AOL objects) within their database instances. When customizing or configuring Oracle E-Business Suite applications, it is often necessary to deploy these objects from one instance to another.

For example, you may have one instance for customizing your Oracle E-Business Suite (DEV), one instance for testing your customizations (TEST), and one production instance (PROD). The AOL objects in this example would be deployed from DEV to TEST to PROD, as shown in "Figure 1-2. Migration overview" below. Manually re-keying these configurations would be both time-consuming and error prone.





Object Migrator automates the deployment of these AOL objects between Oracle E-Business Suite instances, increasing both the accuracy and efficiency of object deployments. Object Migrator also supports archiving and restoring configurations.

Object Migrator is installed as an application within Oracle E-Business Suite applications.

Object Migrator consists of a series of concurrent programs that run through the standard Oracle Submit Requests form, making it easy and familiar to use. Users launch an Object Migrator program for each AOL object type (such as concurrent program, value set, or menu). You can migrate or compare objects. For each program, users specify parameters detailing information about how to run the program.

Based on the concurrent request parameters, Object Migrator:

- Deploys the objects to the destination
- Validates and transforms data values as required
- Identifies business rule violations and reporting migration outcome

The results of each Object Migrator execution can be queried from the standard Oracle View Requests form. Each execution run produces an output report that lists the parameters passed to the program, the objects queried for migration, and the detailed results of the migration.

Migration Capabilities

Object Migrator supports the following capabilities when migrating each object type:

- Migrate a single object, a range of objects, or objects matching a string with wild cards
- Rename an object as it is migrated into the destination instance
- Create new objects and update existing objects in the destination instance
- Retain referential integrity when creating or updating existing objects just as if performed using the application forms
- Migrate across releases of Oracle E-Business Suite
- Migration simulation to identify issues with data setups without actually migrating data (can run a migration simulation as a "dry run" before an actual migration)

Version Control Overview

You can use Object Migrator to save data to archive tables as objects are migrated across Oracle E-Business Suite instances. This feature can be used to store new versions of objects. Object Migrator also allows you to use this archived data as your source information, thus enabling you to revert your objects back to previous versions. You can use Object Migrator reports to view complete version histories of a specific object or a group of objects. The object archive is the version control repository used by Object Migrator. Each object type that Object Migrator migrates can be archived, and sets of objects of the same or different objects types can be grouped together into a single logical archive. The object archive resides in the instance where Object Migrator is installed, allowing AOL object versions from any instance to be stored in one central location.

Version labels are used by the object archive to identify groupings of objects into a single logical archive. The version label is defined when the Object Migrator program is run. It is also used to identify objects to retrieve from the archive, and to report on objects in the archive.

Within each archive (as specified by a version label), it is possible to store multiple objects of multiple object types. When saving an object to the object archive, Object Migrator:

- Copies the entire definition of the object into the archive
- Gives the new object a revision number that tracks the number of times a particular object has been archived

A particular object can be archived only once within a given version label.

Object Migrator also makes it possible to purge data from the object archive as it becomes obsolete.

Reports Overview

The following reports are available in Object Migrator:

- Comparison reports
- Migration audit reports

Table 1-2. Reports used in system maintenance and administration

Concurrent Program Name	Report Name
Object Migrator Audit Report	CLMRMAD1.rdf
Maintain Object Migrator Views	CLMRDVW1.rdf
Migration Comparison Report	CLMRMMC1.rdf
Object Archive Version Detail Report	CLMRMVR1.rdf
Purge Object Archive Versions	CLMRDPV1.rdf
Purge Object Migrator Interface Tables	CLMRDPG1.rdf

Comparison Reports

Before migrating a new version of a specific AOL object from one database to another, it is possible to compare the version that will be migrated to the version already present in the destination database. Object Migrator generates a comparison report showing the differences between the two versions.

Long fields and translated data (for instances running under multi-language support [MLS]) are not compared in the comparison reports.

Some child entities are not compared in the comparison reports. Major exceptions are noted in "Migration Rules and Parameters" on page 82.

Migration Audit Reports

Object Migrator provides an audit report with every batch of objects being migrated. This report provides an audit trail of successfully migrated objects as well as a detailed exception listing for objects that failed migration. The report also lists key information about each object.

Installation and Upgrade Requirements

- "Considerations for Version 12.2.3" below
- "File System and Tablespace Requirements" on the next page
- "Platform Requirements" on the next page
- "Instance Requirements" on page 18
- "Distributed Database Option Recommended" on page 18
- "Application Naming Requirements" on page 18
- "Version Control Considerations" on page 19
- "Obtaining a User Name and Password" on page 19

Considerations for Version 12.2.3

Consider the following:

- Do not customize any forms related to Object Migrator including Concurrent Programs Definitions and Submit Concurrent Request Parameters. Customizations to these forms are not supported.
- Do not convert Object Migrator custom schema (CLM) using the Oracle Applications Tablespace Model (OATM). When you migrate entities using OATM, use the OATM utility and exclude the Object Migrator custom schema.
- The 12.2.3 directory contains scripts and code for your Oracle E-Business Suite Release 12.2 installation.

For example, when you extract the 12.2.3 Object Migrator installation bundle, a directory named CLM_12_2_3/install/12.2.3 is created. This directory contains scripts for the installation of the Object Migrator product for Oracle E-Business Suite Release 12.2.

• Oracle Applications 10.x, including Migrate Zooms, Migrate Help Text, Migrate Menus, and the Migrate Named SQL migrators, is no longer supported.

In Oracle E-Business Suite 12.0.0 and later releases, the Migrate FSG Row/Col Sets migrator is not supported. For more information on specific migrators, see "Object Migrator Concurrent Programs" on page 10.

Upgrade Requirements

This section lists all requirements before upgrading to Object Migrator 12.2.3.

- The PPM Extension for Oracle E-Business Suite and PPM Center applications should be at version 9.40 or later.
 Earlier versions may work. For details, contact support.
- Oracle E-Business Suite releases.

Release	Release Version and Patch Details	
11	All	
11i	11.5.1-11.5.10.2 and the FND.H Mini Pack	
12	12.0.0-12.0.4	

- Use a custom SQL account to run the Object Migrator. It works better for separating Object Migrator objects and standard Oracle E-Business Suite application objects.
- Version 7.5 of Object Migrator backs up the data for archived users during the upgrade process. Make sure there is adequate database space before beginning the upgrade.

File System and Tablespace Requirements

Object Migrator requires a minimum amount of disk space to be successfully installed or upgraded.

Object Migrator requires a minimum amount of tablespace in order to function properly.

For details of the requirements, System Requirements and Compatibility Matrix.

Requirements directly relate to number of objects placed under version control, see "Version Control Considerations" on page 19 for details. In addition, sizing may depend on your database version and configuration.

Platform Requirements

Because Object Migrator works within Oracle E-Business Suite and uses standard Oracle tools, it can run on any platform running Oracle E-Business Suite.

Installation of Object Migrator utilizes a shell script to drive the installation. The location in which Object Migrator is being installed must support Bourne shell executions.

Instance Requirements

Object Migrator runs as concurrent programs using Oracle E-Business Suite. The instance hosting Object Migrator must be able to run a concurrent program.

Object Migrator requires that Oracle E-Business Suite have the Applications Object Library (AOL) installed.

Object Migrator:

- Resides as a custom application within the Oracle E-Business Suite instance
- Uses database tables to store object information

Object Migrator should be installed in an instance that will not be refreshed. For example, install Object Migrator on a production instance or an instance dedicated to hosting Object Migrator.

If the database does need to be refreshed, export the data in the Object Migrator tables (all migrator table names begin with CLM) before the refresh and import the data after the refresh is completed.

Distributed Database Option -Recommended

Object Migrator uses database links to access all databases. The Distributed Database Option is required to insert, delete, or update data on a remote database. It is strongly recommended that this option be active on all the databases being used as sources and destinations. For information on how to install Object Migrator without the Distributed Database Option, see "Using Object Migrator Without the Distributed Database Option" on page 46.

Note: If using Object Migrator with Deployment Management, the Distributed Database Option is required.

The database where Object Migrator resides must be configured such that Oracle E-Business Suite databases that will be the source or destination of a migration can be accessed using database links (that is, configurations like tnsnames, listener, or global names).

Application Naming Requirements

For fresh installation, ensure that there are no applications with the short name CLM registered in Oracle E-Business Suite. In addition, ensure that no applications with the name Object Migrator are registered in Oracle E-Business Suite.

For upgrade, ensure that the current version of Object Migrator is 12.2 or later, and that the short name of Object Migrator should be CLM in Oracle E-Business Suite, and the SQL account used to run Object Migrator should also be CLM.

Version Control Considerations

Object Migrator uses archive tables to store version information for AOL objects. These tables reside on the instance where Object Migrator is installed.

We recommend using version control functionality on only one installation. If Object Migrator is installed on multiple databases and uses the version control functionality on all the installations, multiple AOL object repositories will exist.

Sizing Requirements for Object Archive Tables

When saving an object to the object archive, Object Migrator takes the entire definition of the object and stores it in archive tables. The growth of these archive tables directly corresponds to the number of objects and the number of versions put into these tables. For some objects, object complexity and size may also be a factor.

If periodic storage of versions of entire groups of objects is planned rather than only objects that change, then more tablespace will be required than the recommended 30 megabytes.

We recommend starting with a 30 megabyte allocation and then adding tablespace as needed.

Obtaining a User Name and Password

Each user who is going to run Object Migrator must have an Oracle E-Business Suite user ID and password, and be given access to run one or more Object Migrator programs using the Submit Request form.

You should obtain this information from your system administrator. Your administrator may set up a specific responsibility for Object Migrator usage, or may incorporate Object Migrator functions into an existing responsibility.

Installing and Configuring Object Migrator

- "Pre-Installation Setup" below
- "Installing Object Migrator" on page 24
- "Configuring Your System to Work with Object Migrator" on page 27
- "Preparing Patch File System" on page 34

Pre-Installation Setup

Before beginning the Object Migrator installation, you need to complete the instructions in this section.

Registering Object Migrator as a custom application

As part of setting up custom application, use the Oracle AD Splicer utility (adsplice) to register Object Migrator as a custom application of Oracle E-Business Suite Release 12.2. This ensures that Object Migrator is set up for online patching.

For more information about EBS 12.2, refer to Developing and Deploying Customizations in Oracle E-Business Suite Release 12.2 (Doc ID 1577661.1) at Oracle Support website.

Note:

- Do not use the Applications window to register applications in EBS 12.2.
- When installing or upgrading to EBS Release 12.2, run adsplice only after you apply the 12.2.3 or later Release Update Pack (12.2.2 is also a secure code level for adsplice, but we only certified 12.2.3). Running adsplice before your instance is at the 12.2.3 code levels may cause file synchronization issues.
- Run adsplice on the Run edition file system and ensure that the EBS instance is not in an online patching cycle.

Follow these steps to register Object Migrator as a custom application using adsplice:

- 1. Download Patch 3636980 "Support Diagnostics (IZU) patch for AD Splice" from the My Oracle Support website.
- 2. Manually copy the three .txt files from the **3636980\izu\admin** directory to your own temporary directory.
- 3. Rename izuprod.txt to clmprod.txt, and izuterr.txt to clmterr.txt.

Object Migrator Guide and Reference Installing and Configuring Object Migrator

- In newprods.txt, clmprod.txt, and clmterr.txt, change all lowercase izu to clm and all uppercase IZU to CLM (keep the case sensitivity).
- 5. Change all references to prodid 278 to your own unique number. It is recommended you pick a number above 50,000 that is not already in use.
- In clmterr.txt, change Oracle_Support_Diagnostic_Tools to Object_Migrator. Make sure the application short name CLM is not duplicate with any existing application short names and no existing application is with the name Object Migrator.
- 7. Copy clmprod.txt, clmterr.txt, and newprods.txt to the \$APPL_TOP/admin directory.
- 8. Change to the \$APPL_TOP/admin directory.
- 9. Run adsplice.
- 10. After you run adsplice, verify the creation of the customer application in the database by doing the following:
 - a. Connect to the Run Edition and log in to SQL*Plus as APPS user, for example:

sqlplus APPS/APPS

b. Run the following SQL query to confirm that the fnd_application table has one row:

```
select * from fnd_application where
```

application_short_name = 'CLM';

c. Run the following SQL query to confirm that the application name is Object Migrator:

```
select application_name from fnd_application_tl where
```

language='US' and application_id in (select

application_id from fnd_application where

application_short_name = 'CLM')

d. Run the following SQL query to check the product installations table has one row for your custom product. This statement should return one row only:

```
select * from fnd_product_installations where
APPLICATION_ID in (select application_id from
fnd_application where application_short_name = 'CLM')
```

e. Run the following SQL query to check the database user. This statement should return one row only:

select * from dba_users where username = 'CLM';

f. You should also be able to log in to the database as user CLM with password

Object Migrator Guide and Reference Installing and Configuring Object Migrator

CLM.

sqlplus CLM/CLM

- 11. To ensure the new environment file is picked up, log out then log back in again as user applmgr. Do the following:
 - a. When connecting to the Run Edition file system, run the following command to confirm \$CLM_TOP is set correctly:

echo \$CLM_TOP

For example, the value of \$CLM_TOP is

/u01/oracle/VIS/fs1/EBSapps/appl/clm/12.0.0, in which fs1 is the name of the current Run Edition file system.

b. Run the following command to check the file system is created correctly:

```
ls $CLM_TOP
```

This command should return the following directory list:

admin log mesg out sql

You can find the CLM application from Oracle EBS by doing the following:

- 1. Log in to the Oracle E-Business Suite for this database instance.
- 2. Through the system administrator responsibility, navigate to the registered application. For example, **System Administrator** > **Application** > **Register**.
- 3. From the menu, select **View**> **Find**, and search for the application named Object Migrator.

The system returns the following result.

Applications				
Application	Short Name	Basepath	Description	
Object Migrator	CLM	CLM_TOP	Object Migrator	<u> </u>
ļ				
				ś
	l			
1	l			
<u></u>				

You can find the CLM user from Oracle EBS by doing the following:

- a. Log in to the Oracle E-Business Suite for this database instance.
- b. Through the system administrator responsibility, navigate to the registered user. For example, **System Administrator** > **Security** > **Oracle** > **Register**.

c. From the menu, select **View**> **Find**, and search for the database user named CLM.

Database			Install		
User Name	Password	Privilege	Group	Description	
CLM		Enabled	0	Object Migrator Account	÷
			1	1	i.

The system returns the following result.

For more information about creating custom applications, refer to section 1 to section 3 of Creating a Custom Application in Oracle E-Business Suite Release 12.2 (Doc ID 1577707.1) at the Oracle Support website.

Creating Tablespaces and Rollbacks

We recommend that Object Migrator have separate tablespaces. If Object Migrator will reside in a production Oracle E-Business Suite instance, then it must have separate tablespaces.

To create tablespaces and rollbacks:

1. Create the following tablespaces, or ensure the existing tablespace is increased to accommodate the extra demand.

Tablespace	Recommended Size	Function
CLM_DATA	60 MB	Saves interface and archive data
CLM_INDEX	30 MB	Saves index data

See the size requirements for the tablespaces in "File System and Tablespace Requirements" on page 17.

You can name the tablespace anything you want.

2. Add at least one rollback segment per additional tablespace, to support Object Migrator migration transactions.

Create them in a separate tablespace reserved for rollback segments and use the OPTIMAL size constraint to make sure that the rollback segments automatically deallocate space as it becomes free. Object Migrator Guide and Reference Installing and Configuring Object Migrator

For example:

CREATE PUBLIC ROLLBACK SEGMENT RB1 TABLESPACE RB_TS

STORAGE (OPTIMAL 60 M);

Granting more privileges to the CLM user

To grant more privileges to the CLM user, run the following SQL query with the sysdba account in the Oracle EBS database:

GRANT CREATE VIEW TO CLM; GRANT CREATE PROCEDURE TO CLM; GRANT CREATE SYNONYM TO CLM; -- Suppose the tablespace names are CLM_DATA and CLM_INDEX ALTER USER CLM quota unlimited on CLM_DATA; ALTER USER CLM quota unlimited on CLM_INDEX;

Installing Object Migrator

All object names created by the install scripts begin with CLM. If an application with a name of CLM already exists, please contact support.

Install Object Migrator in the Run Edition of the Oracle EBS instance that hosts Object Migrator and ensure the instance is not in an online patching cycle. Suppose the root directory of your Oracle E-Business Suite application-tier installation is /u01/oracle/VIS, you can run the following command to source the Run Edition:

```
source /u01/oracle/VIS/EBSapps.env run
```

For details about how to connect to the Run Edition, refer to Developing and Deploying Customizations in Oracle E-Business Suite Release 12.2 (Doc ID 1577661.1) at Oracle Support website.

To install Object Migrator:

- 1. Ensure you have completed the steps in "Pre-Installation Setup" on page 20.
- 2. Connect to the Run Edition of the EBS instance that hosts Object Migrator.
- 3. Place the bundle file CLM_1223.zip into the folder where the Object Migrator installation is to be staged. For example, you can do the following:
 - a. Create a directory under \$CLM_TOP by running the following command:

mkdir \$CLM_TOP/install

Object Migrator Guide and Reference Installing and Configuring Object Migrator

- b. Upload CLM_1223.zip to the \$CLM_TOP/install directory.
- Extract the Object Migrator bundle by running the following command: For example for UNIX, uncompress and unarchive the files using the following commands:

unzip CLM_1223.zip

This creates an installation folder, CLM_12_2_3, with subfolders of:

- install/12.2.3 containing all the installation scripts to install Object Migrator
- srw containing all of the Object Migrator executables
- 5. Navigate to the install folder.

For example:

cd \$CLM_TOP/install/CLM_12_2_3/install/12.2.3

6. Run the CLM_INSTALL script.

The installation script will start and use the Bourne shell. The script validates the information typed at each prompt. The install process can be stopped by typing a period (.) at any of the prompts.

The script runs all the Object Migrator installation scripts to:

- Create database objects used by Object Migrator
- Create value sets and register concurrent programs used to run migrators, system maintenance, and administration reports
- Create a limited number of grants and synonyms to the APPS account to facilitate request submission
- Define incompatibilities between different Object Migrator programs
- Grant privilege of Object Migrator-owned database objects to the Oracle EBS APPS account
- Create synonyms for Object Migrator-owned database objects under the Oracle EBS APPS account
- a. Open a command window.
- b. Run the following command.

chmod ugo+x CLMMAIN_DYN

c. Run the script. For example:

sh CLM_INSTALL

d. Type values for the following prompts.

Prompt	Description
Have you registered the Object Migrator user using adsplice ? (Y/N) :	Confirm (\mathbf{Y} or \mathbf{N}) whether the Object Migrator SQL account has been created using adsplice.
Enter username of Object Migrator sql account (. to exit):	The user name for the Object Migrator SQL account that was created and registered using adsplice in Oracle E-Business Suite.
Enter the password for \$clm_acct sql account (. to exit):	The password for this Object Migrator SQL account.
Please reenter for verification:	The password for this Object Migrator SQL account.
Please enter the connect string (ex. PROD, DEV, etc.) for the Object Migrator database.	 Specifies the database on which Object Migrator is being installed. When using SQL*Net 1.0, type the entire two-task database connect string. (For example, T:dev_ machine:MIGRATE) When using SQL*Net 2.0 or later, type the database identifier (usually ORACLE_SID).
Enter the tablespace for the Object Migrator tables (. to exit):	All Object Migrator tables will go into the specified tablespace. The SQL account must have permissions to write to this tablespace; for example, CLM_DATA.
Enter the tablespace for the Object Migrator indexes (. to exit):	All Object Migrator indexes will go into the specified tablespace. The SQL account must have permissions to write to this tablespace; for example, CLM_INDEX.
Enter username of APPS user - usually APPS (. to exit):	The user name for the Oracle E-Business Suite APPS account.
Enter the password for \$apps_acct user (. to exit):	The password for this APPS account.
Please reenter for verification:	The password for this APPS account.

- 7. The script outputs log messages as standard output on your screen and saves the output to a log file named clm_log.out in the current folder.
- 8. Move the rdf files from the srw folder of the Object Migrator bundle to their permanent location under \$CLM_TOP by following these steps:
 - a. Source the Run Edition and make sure you are in the Run Edition file system.
 - b. Create the report folder under \$CLM_TOP by running the following command:

```
mkdir -p $CLM_TOP/reports/US
```

c. Copy the report files by running the following command:

```
cp $CLM_TOP/install/CLM_12_2_3/srw/* $CLM_TOP/reports/US
```

d. List all files under the \$CLM_TOP/reports/US directory by running the following command:

11 \$CLM_TOP/reports/US

You will see 22 files with the extension .rdf.

9. (Optional) The installation files are not needed for continued use of Object Migrator, but it is recommended that you save them.

Object Migrator must be configured before it can be used to migrate data. For these instructions, see "Configuring Your System to Work with Object Migrator" below.

Configuring Your System to Work with Object Migrator

After installing Object Migrator, you need to configure Oracle E-Business Suite system to work with it. Configuration consists of the following:

- Create database links for each source and destination database.
- Register these database links with Object Migrator.
- Define security to access Object Migrator programs, including users, responsibilities, report groups.
- Run the Maintain Object Migrator Views report.
- Run a test migration with **Report Only** set to **Yes** to validate the installation.

The example given is a simplified case that assumes the system administrator will be able to access all Object Migrator functions. See "Setting Up Object Migrator Security" on page 65 for more information about security options.

Creating and Registering Database Links

- 1. To create database links on CLM schema, use either of the following two methods:
 - With TNS name
 - a. Add an entry in the tnsnames.ora file for all the databases that are used in your Object Migrator implementation. Make sure that you update the tnsnames.ora file on each separate database server.

Note: The database configurations (for example, tnsnames.ora) must support connection using the database link.

b. Create database links to all valid source and destination databases using the APPS account.

Perform this step in the instance containing Object Migrator using the SQL account under which Object Migrator was installed. For example:

```
SQL> create database link PROD_LINK
```

```
2 connect to APPS identified by APPS/APPS
```

- 3 using 'PROD';
- Without TNS name

Create database links to all valid source and destination databases using the APPS account.

The following is an example:

CREATE DATABASE LINK PROD_LINK

CONNECT TO APPS

IDENTIFIED BY APPS

USING '(DESCRIPTION=(ADDRESS=(PROTOCOL=tcp)

(HOST=16.186.74.75)(PORT=1521))

(CONNECT_DATA=(SID=VIS)))';

2. Create the same database links on the Oracle EBS APPS schema.

Note: If you are using a version earlier than Object Migrator 12.2, you need to create database links on only the CLM schema. However, on Object Migrator release 12.2 and later, you must create the same database links on both the CLM schema and the Oracle EBS APPS schema.

If you update database links on the CLM schema, you must update the corresponding database links on the EBS APPS schema.

3. Test each link after creating it by executing the following in SQL*Plus:

sqL> select count(*) from fnd_user@<DB_Link_Name> where rownum = 1;

- 4. Add each database in your Object Migrator environment to the CLM_ DATABASES value set, including the database where Object Migrator is installed.
 - a. Select the System Administrator responsibility.
 - b. Navigate to the Define Value Set Values window. For example, Application > Validation > Values.
 - c. Type CLM_DATABASES in the **Name** field.
 - d. Click Find.
 - e. Query all the records in the Values, Effective tab. To bring up the following: • Object Migrator account initially set to Disabled
 - **Object archive** for version control
 - **Open Interface** initially set as **Disabled**
 - f. Add additional records in the **Values**, **Effective** tab, one per database instance. The values typed in the **Value** and **Translated Value** fields need to be integers with no leading zeroes.
 - g. Use the **Description** to identify the database instance to users.
 - h. Clear the Enabled option for the Value **1** if it is not already disabled.

	N	CLM DATABASES	Databa	ace 1	names		
Name Dependent Value Set Independent Value					101000		
Values (CLM	_DATABASES)						
Values,	Effective	Values, Hierarchy,	Qualifier	rs			
Value	Translated Value	Description		Ena	abled From	То	
1	1	Object Migrator	Acct			10	
50	50	PPMQAVM78_EBS12	1_LINK			Î	
60	60	PPMPCOE05_EBS12	2_LINK			i i	Ì
70	70	PPMQAVM36_EBS12	2_LINK			İ	
900	900	Object Archive				İ	İ
950	950	Open Interface				ĺ	

5. For each database link, add a value to the CLM_DB_LINKS value set. For the descriptions, use the exact database link names.

- a. Select the System Administrator responsibility.
- b. Navigate to the Define Value Set Values window. For example, Application > Validation > Values.
- c. Type CLM_DB_LINKS in the Name field.
- d. Click Find.
- e. Query all the records in the Values, Effective tab.
- f. Add and enable all the database links that you created.

Make sure that the **Value** column matches with the corresponding **Value** column in the CLM_DATABASES value set.

	Name CL	M_DB_LINKS	tabase	Links		
Deper	ndent Value Set					
In	dependent Value					
Valuec (CLN	DB IINKS)					
ardes (CER	_DD_EIMK3/					
Values,	Effective	Values, Hierarchy, Qual	fiers			
	Tranclated		Er	abled		
Value	Value	Description		From	То	:]
1	1	No Link				
50	50	PPMQAVM78_EBS121_LIN	<			
60	60	PPMPCOE05_EBS122_LIN	< 💌			
	70	PPMQAVM36_EBS122_LIN	< 💌			
70	900	Object Archive				
70 900						
70 900 950	950	Open Interface				

Adding Object Migrator Concurrent Programs

Object Migrator concurrent programs can be added individually or as a group to a responsibility. Depending on the security constraints for your company, you may want to create a dedicated Object Migrator responsibility. These instructions assume that programs are added to an existing responsibility.

To add the Object Migrator application or individual module concurrent programs to the appropriate request security groups:

- Navigate to the Define Request Security Group window. For example, Security > Responsibility > Request.
- 2. Query a request group called System Administrator Reports.
- 3. On the **Requests** tab insert a record by clicking **Add Row** from the toolbar.
- 4. Select **Application** in the **Type** field.

Object Migrator Guide and Reference Installing and Configuring Object Migrator

5. Select **Object Migrator** as the application. Or, add individual programs.

For a list of individual programs, see "Object Migrator Concurrent Programs" on page 10.

Group Application Code Description	Application C	Dbject Library		
equests Type		Name	Application	
Application ·		Object Migrator	Object Migrator	
Program -		Users of a Responsibility	Application Object Library	
Program *		Signon Audit Concurrent Requests	Application Object Library	
Program ·		Signon Audit Forms	Application Object Library	
Program +		Signon Audit Unsuccessful Logins	Application Object Library	
Program +		Signon Audit Users	Application Object Library	
Program ·		Signon Audit Responsibilities	Application Object Library	
Program -		Active Users	Application Object Library	
Program ·		Active Responsibilities and Users	Application Object Library	
Program •		Prints environment variable values	Application Object Library	

6. For optional setups, see "Optional Configurations for Object Migrator" on page 38.

Running the Maintain Object Migrator Views program

The Maintain Object Migrator Views program defines the views used by some Object Migrator parameters when submitting Object Migrator migrations. It keeps the Object Migrator views current with the number and statuses of your databases.

We recommend scheduling this program to run once a day.

For details regarding the support of these views, see "Maintaining Object Migrator Views" on page 57.

To run the Maintain Object Migrator Views program:

 If you have more than four databases in your Object Migrator environment, increase the value for the open_links database parameter to at least 20 and bounce the database. For more information, see "open_links Database Parameter" on page 61.

- 2. Open the Submit Requests form. For example, **Other > Requests > Run**.
- 3. Query for and launch the **Maintain Object Migrator Views** program, using the following values.

Parameter Name	Value
Туре	Request
Name	Maintain Object Migrator Views
Report Only	No . Re-create the Object Migrator views based on the current enabled values in the CLM_DATABASES and CLM_ DB_LINKS value sets and the current statuses of your remote databases.

4. Make sure to view the report output of this program. The output lists all the enabled databases for use with Object Migrator and any errors encountered while trying to connect to these databases.

For information regarding the support of these views, see "Maintaining Object Migrator Views" on page 57.

Validating Installation

This step is optional, but recommended.

To validate your installation, launch one of the Object Migrator programs with **Report Only** set to **Yes**.

Object Migrator Guide and Reference Installing and Configuring Object Migrator

un this Keques	st				Сору
Nam	e Migrate Concurrent Pro	ograms			
Operating Uni	t				
Parameter Lang	s 50.60.Oracle iProcures Parameters	ment.O	racle iProcureme	nt. 1. POXCATRN. POX	(CATRN2
	Source Database	50	PPMQAVM78_EBS	121_LINK	
	Dest Database	60	PPMPCOE05_EBS	122_LINK	
At these Tim	Source Application	Oracle	Procurement		
Run the	Dest Application	Oracle	e iProcurement		
	Selection Type	1	Specific Obje	ct	
Jpon Complet	Specific Conc Program	POXCAT	RN		Update Items for Category
1	New Conc Program Short Name	POXCAT	RN		
La	New User Program Name				
No	Conc Program From				
Prin	Conc Program To				
	Conc Program Like				
Help (<u>C</u>)	Save To Archive	2	No		
	Version Label				
	Version Desc	-			
	Recover From Archive	2	No		
	From Version Label				
	Overwrite if Exists	1	Yes		
	Partials Allowed	2	No		
		•			

Registering Custom Applications

If you have custom applications for which you want to migrate data, you must register them within Oracle Applications.

1. In the Object Migrator instance, define any custom applications for which data will be migrated. For more information, see "Managing Custom Applications" on page 61.

Application	Short Name	Basepath	Description
Accounts Payable	XXAP	XXAP_TOP	Corp Accounts Payable
Purchasing System	XXP 0	XXPO_TOP	Corp Purchasing
		Î	

2. See "Optional Configurations for Object Migrator" on page 38 for additional optional configurations.

Preparing Patch File System

To prepare a patch file system, follow these steps:

1. Connect to the Run Edition of the EBS instance that hosts Object Migrator, and start an online patching cycle by running the following command:

adop phase=prepare

After the preparation phase is completed, the same folder structure for CLM is created on the Patch Edition file system.

For example, source the Patch Edition file system, make sure that you are on the Patch Edition file system, and then run the following command:

ls \$CLM_TOP

This command returns the following directory list:

admin log mesg out sql

- 2. Copy the rdf files to the Patch Edition file system by follow these steps:
 - a. Source the Patch Edition file system and make sure that you are on the Patch Edition file system.

In that way, \$CLM_TOP is pointing to the top directory of CLM custom
application in the patch file system; for example,
/u01/oracle/VIS/fs2/EBSapps/appl/clm/12.0.0.

b. Create the new directory reports/US under \$CLM_TOP using the following command:

mkdir -p \$CLM_TOP/reports/US

c. Copy the rdf files from the Run Edition file system to the Patch Edition file system. For example, you can use the following command:

```
cp
/u01/oracle/VIS/fs1/EBSapps/appl/clm/12.0.0/reports/US
/*
```

/u01/oracle/VIS/fs2/EBSapps/appl/clm/12.0.0/reports/US

3. Connect to the Run Edition of the EBS instance that hosts Object Migrator, and complete the patching cycle by running the following command:

adop phase=finalize,cutover,cleanup

KUpgrading Object Migrator

Upgrade Object Migrator in the run edition of the Oracle EBS instance that hosts Object Migrator and ensure the instance is not in an online patching cycle. Suppose the root directory of your Oracle E- Business Suite application-tier installation is /u01/oracle/VIS, you can run the following command to source the run edition:

source /u01/oracle/VIS/EBSapps.env run

For details about how to connect to the run edition, refer to Developing and Deploying Customizations in Oracle E-Business Suite Release 12.2 (Doc ID 1577661.1) at the Oracle Support website.

To upgrade Object Migrator:

Note: When you are upgrading Object Migrator, you can keep EBS server up, so that no extra actions need to be taken after the upgrade.

- 1. Connect to the run edition of the EBS instance that hosts Object Migrator. Make sure the instance is not in an online patching cycle.
- 2. Place the bundle file CLM_UPG1223.zip into the top folder of Object Migrator. For example, you can do the following:
 - Create a directory under \$CLM_TOP by running the following command:

mkdir \$CLM_TOP/upgrade

- Upload CLM_UPG1223.zip to the \$CLM_TOP/upgrade directory.
- 3. Extract the Object Migrator bundle.

For example for UNIX, extract the files using the following command:

unzip CLM_UPG1223.zip

This process creates the \$CLM_TOP/upgrade/CLM_12_2_3 directory containing the upgrade files. The subfolders in the directory include upgrade/12.2.3, containing all the scripts needed to upgrade Object Migrator.

4. Navigate to the script folder.

For example: cd \$CLM_TOP/upgrade/CLM_12_2_3/12.2.3

5. Run the CLM_UPGRADE script.

The upgrade script starts and uses the Bourne shell. The script validates the information typed in each prompt. The upgrade process can be stopped by typing a period (.) in any prompts.

The script also implements the following:

- Remove HP or HPE from the development company of Object Migrator.
- Incorporate the code change of the defect QCCR1L56472 into Object Migrator.

To run the CLM_UPGRADE script:

- a. Open a command window.
- b. Run the script.

For example: sh ./CLM_UPGRADE

c. Type values for the following prompts.

Prompt	Description
Have you registered the Object Migrator user using adsplice ? (Y/N) :	Confirm (YorN) whether the Object Migrator SQL account has been created using adsplice.
Enter user name of Object Migrator sqla ccount (. to exit):	The user name for the Object Migrator SQL account that was created and registered using adsplice in Oracle E- Business Suite.
Enter the password for \$clm_acct sql account (. to exit):	The password for this Object Migrator SQL account.
Please reenter for verification:	The password for this Object Migrator SQL account.
Please enter the connect string (ex. PROD, DEV, etc.) for the Object Migrator database.	 Specifies the database on which Object Migrator is being installed. When using SQL*Net 1.0, type the entire two-task database connect string. (For example, T:dev_ machine:MIGRATE). When using SQL*Net 2.0 or later, type the database identifier (usually ORACLE_SID).
--	--
Enter the tablespace for the Object Migrator tables (. to exit)	All Object Migrator tables goes into the specified tablespace. The SQL account must have permissions to write to this tablespace. For example, CLM_DATA.
Enter the tablespace for the Object Migrator indexes (. to exit)	All Object Migrator indexes goes into the specified tablespace. The SQL account must have permissions to write to this tablespace. For example, CLM_INDEX.
Enter user name of APPS user - usually APPS (. to exit):	The user name for the Oracle E-Business Suite APPS account.
Enter the password for \$apps_ acct user (. to exit):	The password for this APPS account.
Please reenter for verification:	The password for this APPS account.

- 6. The script generates log messages as standard output on your screen and saves the output to a log file named clm_log.out in the current folder.
- 7. (Optional) The upgrade files are not needed for continued use of Object Migrator, but it is recommended that you save them.

Optional Configurations for Object Migrator

- "Setting Up a Separate Responsibility for Migrations" below
- "Setting Up an Unrestricted Migrator" on page 41
- "Using Object Migrator Without the Distributed Database Option" on page 46

Setting Up a Separate Responsibility for Migrations

It is possible to set up a separate responsibility solely intended for Migrations and then assign this responsibility to specific users. The following example shows one implementation possibility.

To set up a separate responsibility for migrations:

- 1. Sign on to the Oracle E-Business Suite on the instance in which the Object Migrator is installed.
- 2. Select the System Administrator responsibility.
- 3. Navigate to the Define Menu form. For example, **Application > Menu**.
- 4. Create a new menu called **CLM_MIGRATE.**

Add the Run Reports and View All Concurrent Requests forms to the menu. This allows users to submit Object Migrator requests and view the results.

Menus					
	Menu	CLM_MIGRATE			View Tree
	User Menu Name	CLM_MIGRATE			
	Menu Type				
	Description	Object Migrator Main M	enu		
	Icon				
Seq	Prompt	Submenu	Function	Description	Grant
1	Migrate		Run Reports	Migrate Objects	≥ ^
2	View Reports		View All Concurrent Requ	View Migration	
0					
1		<u> </u>		Ì	
Ĭ.	i i				
1					
UL	л		1		•

5. Create another menu called **CLM_MAIN**.

Add the **CLM_MIGRATE** menu as a menu entry. This become the main navigation menu for the new responsibility.

enus					-
	Menu	CLM_MAIN			View Tree
	User Menu Name	CLM_MAIN			
	Menu Type				
	Description	Object Migrator 1	Main Menu		
Seq	Prompt	Submenu	Function	Description	Grant
1	Navigate	CLM_MIGRATE		CLM_MIGRATE	

- 6. Navigate to the Define Request Group form. For example, **Security > Responsibility > Request**.
- 7. Create a new request group called CLM_TOOLS.

Add the Object Migrator application to the request group. Or add individual programs if the group should include limited functionality.

Request Groups				
Group	CLM_TOOLS	3		
Application	Object Migra	tor		
Code				
Description	Object Migra	tor		
Requests				
Туре		Name	Application	
Application	-	Object Migrator	Object Migrator	Â
	Ŧ			
	Ŧ			
	Ŧ			
	Y			3
	Y			ŝ
J	Ŧ			
	*			
	*			
	Ŧ			
Description	Object Migra	tor		

- 8. Navigate to the Define Responsibility form. For example, **Security > Responsibility > Define**.
- 9. Define a new responsibility called Object Migrator.

Add the request group and menu previously defined. And it is possible to include a standard menu and define explicit menu exclusions.

Responsibilities								
Responsibility	y Name	Object M	igrator		E	Effective Dates		
Арр	lication	Object M	igrator			From	01-JUN-2021	
Responsibi	lity Key	OBJECT	_MIGRATOR			То		
Des	cription	Object M	igrator Resposiblity					
• Oracle Applications				- Data G	Group Name	Standard		
 Oracle Self Service W Oracle Mobile Applica 	Veb Appl ations	lications			Application	System Administr	ation	
Menu	CLM_M	AIN		Reque	st Group Name	CLM_TOOLS		
Web Host Name Web Agent Name					Application	Object Migrator		
Menu Exclusions	Exclude	ed Items	Securing Attributes					
Туре	Na	me		De	escription			
Function	-							A
	Ŧ							1
	+							13
	-							Ţ

- 10. Navigate to the Define Concurrent Programs window. For example, **Concurrent > Program > Define**.
 - Modify default values of the Object Migrator concurrent programs, as desired.
 - If there are Object Migrator programs not in use, disable them to prevent them from appearing in select lists.
 - If different groups of users should have different access to a program, copy the program, and modify it appropriately.

See "Setting Up an Unrestricted Migrator" on the next page for a sample of these types of changes.

- 11. Navigate to the Define Application User window. For example, **Security > User > Define**.
- 12. Assign the custom responsibility defined in step 9 to the users who would be doing the migrations.

Object Migrator Guide and Reference Optional Configurations for Object Migrator

Oser Name S	YSADMIN		P	erson				
Password			Cus	tomer	SYS/	ADMIN SYSA	DMIN	
Description Sy	/stem Admir	nistrator	Su	pplier				
Status Ac	ctive		6	E-Mail				
Password Expira	ation			Fax				
្	Days				Effec	tive Dates		
· /	Accesses					From 01	-JAN-195	51
•	lone					То		
raat Daspagsibilitis	Indira	t Decoorcibilities	Coouring Attributor					
rect Responsibilitie	as Indirec	t Responsibilities	Securing Attributes			Effective	Datas	
rect Responsibilitie	Indirec	t Responsibilities	Securing Attributes	Sect	urity	Effective	Dates	
rect Responsibilitie Responsibility	es Indirec	Application	Securing Attributes	Sector Stary	urity Ip	Effective From	Dates To	
rect Responsibilitie Responsibility Meeting Guest use	er responsi	Application	Securing Attributes	Sector Grou Stand	urity Ip lard	Effective From 14-DEC-20	Dates To 01	
rect Responsibilitie Responsibility Meeting Guest use Meeting End User	er responsi	Application Meeting (Obsolete) Meeting (Obsolete)	Securing Attributes Description	Sector Grou Stand	urity ip lard lard	Effective From 14-DEC-20 14-DEC-20	Dates To 01 01	
rect Responsibilitie Responsibility Meeting Guest use Meeting End User Meeting System C	er responsi r responsib Configure r	Application Meeting (Obsolete) Meeting (Obsolete) Meeting (Obsolete)	Description	Sect Grou Stand Stand Stand	urity ip lard lard lard	Effective From 14-DEC-20 14-DEC-20 14-DEC-20	Dates To 01 01 01	
rect Responsibilitie Responsibility Meeting Guest use Meeting End User Meeting System M	er responsi r responsib Configure re Aonitor resp	Application Meeting (Obsolete) Meeting (Obsolete) Meeting (Obsolete) Meeting (Obsolete) Meeting (Obsolete)	Description	Sector Grou Stand Stand Stand Stand	urity Ip Jard Jard Jard Jard	Effective From 14-DEC-20 14-DEC-20 14-DEC-20 14-DEC-20	Dates To 01 01 01 01	

Setting Up an Unrestricted Migrator

Setting up an unrestricted migrator allows users to migrate objects among all the non-critical database instances while restricting their ability to migrate objects into critical database instances such as a production database instance.

To accomplish this, create a new set of concurrent programs by copying the existing Object Migrator programs and changing the value sets behind the parameters for each of the programs.

The following is an example case of setting up an unrestricted migrator:

- 1. Navigate to the value set window.
- 2. Create a new value set called **CLM_DATABASES_UNRES** by copying the existing value set **CLM_DATABASES**.

Object Migrator Guide and Reference Optional Configurations for Object Migrator

Value Cat Name	CIM DATABASES UNRES	Ileages
value Set Name	CEN_DATADASES_ONAES	024800
Description	Unrestricted Database Name	S
List Type	List of Values 🔹	Security Type No Security
Format Validation	1	
Format Type	Char •	Maximum Size <mark>30</mark> Precision
	□Numbers Only (0-9)	
	Uppercase Only (A-Z)	
	□ <u>R</u> ight-justify and Zero-fi	11 Numbers (0001)
Min Value		Max Value
Value Validation		

3. Remove the databases that are considered critical from the **CLM_ DATABASES_UNRES** value set. The values in this new value set must match the values in the original value set for each database specified.

After this step, the value set should look like the ones in the following window. In this example, assume that STAGE and DVLP are critical databases. Access to the object archive is also not allowed (the unrestricted migrator will not have version control ability).

Deper	Name C ndent Value Set	LM_DATABASES_UNRES	Unrestricted Databa	ase Names	
Inc	lependent Value				
Values (CLM	_DATABASES_UNRES)				
Values.	Effective	Values, Hierarchy, Qua	lifiers		
	Translated	.	Enabled		·
Value 50	Value 50	PPMQAVM78 EBS121 L	INK V	10	
60	60	PPMPCOE05_EBS122_L	INK 🔽		

4. Copy all the existing Object Migrator concurrent programs to create identical concurrent programs for the unrestricted migrator.

- a. Navigate to the Define Concurrent Programs window. For example, **Concurrent > Program > Define**.
- b. Query Object Migrator in the **Program** field.
- c. Use the Down Arrow key to review all the concurrent programs that belong to Object Migrator.

This example uses the Migrate Value Sets program (short name CLMRMVS1) to set up a Migrate Value Sets - Unrestricted program (short name CLMRMVS1_UNRES).

Program Migrate Value Sets Epabled Short Name CLMRMVS1 Application Object Migrator Description Migrate Value Sets Executable Options Name CLMRMVS1 Method Oracle Reports Priority Output Format Save (C) Print Columns Save (C) Print Columns Save (C) Print Columns Style Eadscape Style Required Printer Style Required Printer Business Events Business Events With Parameters Business Events 	Concurrent Programs		
Short Name CLMRMVS1 Application Object Migrator Description Migrate Value Sets Executable Name CLMRMVS1 Options Priority Options Priority Output Format Format Format Save (C) Print Columns 132 Save (C) Print Columns 132 Rows 45 Style Landscape Style Landscape Style Required Printer Style Required Printer	Program	Migrate Value Sets	✓ Enabled
Application Object Migrator Description Migrate Value Sets Executable Options Name CLMRMVS1 Oracle Reports Priority Request Type Incrementor Format Incrementor Save (Q) MLS Function Print Options Print Options Print Incrementor Save (Q) MLS Function Print Operating Unit Mode Options Public Style Rows Run Alone Restart on System Failure Enable Trace NLS Compliant Recalculate Default Parameters Style Required	Short Name	CLMRMVS1	
Description Migrate Value Sets Executable Options Options Name CLMRMVS1 Options Priority Method Oracle Reports Priority Output Fequest Type Output Format Save (C) Incrementor Save (C) Print Output Operating Unit Mode Rows 45 Style Landscape Style Required Printer Style Required Printer Style Required Printer Business Events Events Style Required Printer	Application	Object Migrator	
Executable Name CLMRMVS1 Options Method Oracle Reports Priority Request Type Priority Incrementor Format Save (C) MLS Function Print Print Options Print Save (C) Vuse in SRS Allow Disabled Values Print Run Alone Bestart on System Failure Style Enable Trace NLS Compliant Style Reguired Printer Printer Printer	Description	Migrate Value Sets	
Name CLMRMVS1 Options Method Oracle Reports Priority Request Type Incrementor Format Incrementor Save (Q) MLS Function Save (Q) Operating Unit Mode Columns Operating Unit Mode Columns Use in SRS Allow Disabled Values Run Alone Bestart on System Failure Enable Trace NLS Compliant Recalculate Default Parameters Printer	Executable		
Method Oracle Reports Priority Request Type Incrementor Format Incrementor Save (C) MLS Function Save (C) Operating Unit Mode Columns Quest Rows Quest Rows Allow Disabled Values Rows Run Alone Bestart on System Failure Enable Trace NLS Compliant Recalculate Default Parameters Printer	Name	CLMRMVS1	Options
Request Type Incrementor Format MLS Function Save (Q) Operating Unit Mode Print Columns 132 Use in SRS Allow Disabled Values Run Alone Bestart on System Failure Enable Trace NLS Compliant Recalculate Default Parameters Style Required Business Events Format	Method	Oracle Reports	Priority
Request Type Output Incrementor Format Save (Q) MLS Function Save (Q) Print Operating Unit Mode Columns 132 Use in SRS Allow Disabled Values Rows 45 Run Alone Bestart on System Failure Style Landscape Enable Trace NLS Compliant Style Required Printer Business Events Events Format Events			
Incrementor MLS Function Operating Unit Mode Vuse in SRS Allow Disabled Values Run Alone Bestart on System Failure Enable Trace NLS Compliant Recalculate Default Parameters	Request Type		Output
MLS Function Image: Save (C) Operating Unit Mode Image: Print Image: Save (C) Image: Print Image: Print Image: Print <t< th=""><th>Incrementor</th><th></th><th>Format</th></t<>	Incrementor		Format
Operating Unit Mode Print Columns Columns Rows Rows Rows Style Landscape Style Reguired Printer Business Events Business Events	MLS Function		✓ Save (<u>C</u>)
Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series Image: Column series Column series	Operating Unit Mode		Print
Image: SRS Allow Disabled Values Rows 45 Image: Run Alone Image: Restart on System Failure Style Landscape Image: Image: Restart on System Failure Image: Style Reguired Style Reguired Image: Restart on System Failure Image: Style Reguired Printer			Columns 132
Image: Construction of the second constructi	☑ Use in SRS	Allow Disabled Values	Rows 45
Enable Trace NLS Compliant Style Reguired Recalculate Default Parameters Printer Printer	Run Alone	Bestart on System Failure	Style Landscape
Recalculate Default Parameters	Enable Trace	□ NLS Compliant	Style Reguired
Business Events	Recalculate Default	Parameters	Printer
	Business Events		
Request Submitted (Y) Request Running Post Processing Ended	Req	uest Submitted (Y) Request Running	Post Processing Ended
□ Request On Hold □ Program Completed □ Request Completed (Z)	Req	uest On Hold Program Completed	Request Completed (Z)
Request Resumed Post Processing Started	Req	uest Resumed Post Processing Start	ted
Copy to Session Control Incompatibilities Parameters (G)	Copy to	Session Control Inc	compatibilities Parameters (G)

- d. If your Oracle E-Business Suite release supports it, use the **Copy to** button to create a copy of CLMRMVS1 named CLMRMVS1_UNRES.
- e. If your Oracle E-Business Suite release does not support Copy To functionality, copy the program using the Concurrent Programs Migrator.
 - i. Navigate to the Submit Requests window. For example, **Other > Requests > Run**.
 - ii. Launch the Concurrent Programs Migrator as shown in the following window to copy CLMRMVS1 and create a new program called CLMRMVS1_UNRES.
- 5. Assign the new value set to the new concurrent programs.

- a. Navigate to the Define Concurrent Programs window. For example, **Concurrent > Program > Define**.
- b. Query for the new concurrent program, CLMRMVS1_UNRES.
- c. Click Parameters.
- d. Change the value set associated with Destination Database from **CLM_DATABASES** to **CLM_DATABASES_UNRES**.

	Pro	gram	Migrate	Value Sets				✓ Enabled			
G	Concurren	t Progra	m Param	neters							
		Pro Applio	ogram	Migrate Value Se Object Migrator	ts						
xe	Con	flicts De	omain [Security Group			
200	Seq	Para	meter				Description			Enabled	
ec	5	Objec	t Type				Object Type				A
	10	Sourc	e Datab	ase			Source Databas	e			
	15	Sourc	e DB V	alue			Source DB Valu	e			
Ор	20	Desti	nation D	atabase			Dest Database				
IU: IR IEI	Validation	n Va Defau	ilue Set ilt Type	CLM_OBJECT SQL Statement	TYPE_	SHORT Enable S	ecurity	Description Default Value Range	Object Types Select 'Value S	Set' from	sys -
usi	_□ <u>D</u> isplay		Concat	Displ tenated Description	ay Size on Size	20 25		Description Size Prompt	50 Object Type		
					Takan	D OB					

- 6. Save your work.
- 7. Create a custom menu. See "Setting Up a Separate Responsibility for Migrations" on page 38.
- 8. Create a request group for the unrestricted migrator.
 - a. Navigate to the Define Request Groups window. For example, **Security> Responsibility > Request**.
 - b. Create a new request group called **CLM_TOOLS_UNRESTRICTED**.
 - c. Associate all the unrestricted migrator concurrent programs to this request group.

Object Migrator Guide and Reference Optional Configurations for Object Migrator

Gro	CLM_TOOLS	S_UNRESTRICTED		
Applicat	ion Object Migra	itor		
Co	de CLM_TOOLS	S_UNRESTRICTED		
Descript	ion CLM_TOOLS	S_UNRESTRICTED		
equests				
Туре		Name	Application	
Program	~	Migrate Value Sets	Object Migrator	
	÷			
	~			
	~			
	~			
	~			
	~		<u>`</u>	
	~			
	~			
	~			
		JL	1	

- 9. Create a new responsibility for the unrestricted migrator.
 - a. Navigate to the Define Responsibility window. For example, **Security > Responsibility > Define**.
 - b. Create a new responsibility called **Object Migrator Unrestricted**.
 - c. Associate the new request group CLM_TOOLS_UNRESTRICTED to this responsibility as shown in the following window.
- 10. Assign the new responsibility to users.
 - a. Navigate to the Define Application User window. For example, **Security > Use > Define**.
 - b. Search for the user to whom the responsibility will be assigned.
 - c. Add the **Object Migrator Unrestricted** responsibility to the user. This user now can migrate objects between all the noncritical database instances while the users who have the Object Migrator responsibility can migrate objects among all the database instances, including the critical

instances.

Using Object Migrator Without the Distributed Database Option

We do not recommend using Object Migrator without the Distributed Database option.

Note: When Object Migrator is used with Deployment Management, the Distributed Database Option is required.

When running Object Migrator with a Destination Database other than the current instance, Object Migrator attempts to insert, delete, and update data using database links. This is not allowed by Oracle without the Distributed Database Option.

To work around this restriction, install Object Migrator on each of the instances that can potentially be a Destination Database. Then, whenever an object is to be moved to a given database, log on to the database and run Object Migrator there, setting the Destination Database to be the current database. The Source Database can be a remote database because Object Migrator queries data from only the source database and Oracle allows queries across database links even without the Distributed Database Option.

Because the Distributed Database Option is required to execute database link inserts, updates, or deletes even on the same database, do one of the following when installing Object Migrator on an instance:

 Install Object Migrator into the APPS account, enable value 1 in CLM_ DATABASES (when selecting this value, Object Migrator will not use any database link) and use **Current Database** for its description.

Note: The privileges of the APPS account may need to be extended to allow creating tables and indexes.

 Install Object Migrator in a custom account, and instead of creating a link to the APPS account, grant all the appropriate objects from APPS to the custom account. Then, enable value 1 in CLM_DATABASES and rename it to **Current Database**. Contact support for a sample script to execute these grants.

Migrating and Comparing Objects

- "Running the Object Migrator Request" below
- "Viewing the Migration Results" on page 50
- "Auditing Migration Executions" on page 52
- "Comparing Objects" on page 53

Running the Object Migrator Request

Object Migrator migrations are run through the Submit Request window in Oracle E-Business Suite. By default, Object Migrator defines incompatibilities between migration programs and archive or interface purge programs. This protects the integrity of the migrations.

When migrating report sets between database instances, the following rules apply:

- The concurrent programs referenced by the report set must exist in the destination database.
- The concurrent programs parameters for which the report set has default values must exist in the destination database.
- The request set stage function referenced by the report set must exist in the destination database.

Note: The following procedure reflects Oracle E-Business Suite Release 11i. Navigation paths may differ depending on your Oracle version.

To run the migration program:

- 1. Each Oracle AOL object type requires specific information and has unique rules for migrating between instances. See "Migration Rules and Parameters" on page 82 for the prerequisites and rules related to specific object types.
- 2. When migrating multiple object types, consider the order in which the objects will be migrated. For a list of object dependencies, see "AOL-Dependent Objects" on page 78.
- 3. Log on to Oracle E-Business Suite.

You need access to a user ID and password for a user account that has the responsibility (access) to use Oracle's Submit Requests window and the Object Migrator programs.

- 4. Open the Submit Requests window. In some cases, the form name may be Run Requests.
 - a. From the menu, select **View > Request**.

The Find Requests window opens.

b. Click Submit a New Request.

The Submit a New Request window opens.

- c. Select the **Single Request** radio button.
- d. Click OK.

The Submit Request window opens.

5. In the **Name** field, query the migration program for the object you want to migrate.

For example, the object for moving concurrent programs is **Migrate Concurrent Programs**.

Only Object Migrator programs to which you have been given access by the application system administrator will be displayed.

Submit Request			×
- Run this Request.	•• -]
			Сору
Name	Migrate Concurrent Programs		
Operating Unit			
Parameters			
Language	American English		
		Language Setti	Debug Options
At these Times			
Run the Job	As Soon as Possible		Schedule
Upon Completion	•		
	☑ Save all Output Files	□B <u>u</u> rst Output	
Layout			Options
Notify			
Print to	noprint		Delivery opts
Help (C)		Submit	Cancel

The Parameters window opens for the selected object. Parameters vary according to the object type that you are migrating.

Object Migrator Guide and Reference Migrating and Comparing Objects

• Parameters					
Source Database	50	PPMQAVM78_EBS	S121_LINK		A
Dest Database	60	PPMPCOE05_EBS	S122_LINK		
Source Application	Human	Resources			
Dest Application	Human	Resources			
Selection Type	1	Specific Obje	ect		
Specific Conc Program	ADSPE	KPOST		ADS Danish Postal	Code Upload
New Conc Program Short Name	ADSPE)KPOST			
New User Program Name					
Conc Program From					
Conc Program To					
Conc Program Like					
Save To Archive	2	No			
Version Label					
Version Desc					_
Recover From Archive	2	No			
From Version Label					
Overwrite if Exists	1	Yes			
	(•				()
				QK Cancel (lear Help

- 6. Specify the parameters for the migration.
 - a. Specify the Source Database and Dest Database for each migration.
 - b. Specify any additional parameters required by the object type.

For a detailed description common and object-specific parameters, see "AOL-Dependent Objects" on page 78.

It is possible to migrate one or multiple objects at a time, by changing the **Selection Type** field on the Parameter window. Options are:

- Specific Object. One object is selected for migration at this time. The specific object name needs to be specified.
- Range of Objects. A range of objects is selected for migration at this time. The alphabetic range to use needs to be specified.
- Wild Card Match. Multiple objects are migrated with object names matching a specified string. The string to match, including the percent (%) sign, needs to be specified.
- 7. Click **OK**.

The Parameter window closes. The Submit Requests window is updated with the selected parameters.

◙Submit Request	×
- Run this Request.	
	Copy
Name	Migrate Concurrent Programs
Operating Unit	
Parameters	50. 60. Human Resources. Human Resources. 1. ADSPEDKPOST. ADSPEDKPOST 2 2.
Language	American English
	Language Setti Debug Options
At these Times	
Run the Job	As Soon as Possible Schedule
Upon Completion	·
	⊻Save all Output Files □Burst Output
Layout	Options
Notify	
Print to	noprint Delivery Opts
Help (C)	Submit Cancel

8. Click Submit.

The migration will proceed based on the selected scheduling options.

9. Either submit another request or view the results of the migration in the **Requests** window.

Viewing the Migration Results

You can view the results of the migration using the standard Oracle E-Business Suite request result window. After a migration is complete, the Request window is displayed containing the details and logs related to the migration.

Note: When migrating multiple objects (range or wild card), the migration will fail if no objects can be migrated successfully, but will succeed if even one object is successfully migrated. For this reason, always review the request output carefully.

To open the Request window to view migration details and logs:

 Navigate to the View Requests window. For example, Requests > View. The Find Requests window opens. Object Migrator Guide and Reference Migrating and Comparing Objects

Find Requests	i e constante de la constante de la constante de la constante de la constante de la constante de la constante d
My Completed <u>R</u> equests	
OMy Requests In Progres	3
⊙ <u>A</u> ll My Requests	
OSpecific Requests	
Request ID	
Name	
Date Submitted	
Date Completed	
Status	
Phase	~
Requestor	
Order By Sele	□ Include Reguest Set Stages in Query Request ID t the Number of Days to View: 7
Submit a <u>N</u> ew Reque	st <u>C</u> lear F <u>i</u> nd

- 2. Select the criteria to locate the request. For example, **All My Requests**.
- 3. Click **Find**.

The Requests window opens.

<u>R</u> efresh Data Fi		Requests	Sub <u>m</u> it a New Request	
Request I	D Par	ent		
	Name	Phase	Status	Parameters
5892242	Migrate Concurrent Pro	Running	Normal	CLMRMCP1, 50, 50, 60, CLM
5892241	OAM Applications Dashb	Pending	Scheduled	(None)
5892240	OAM Applications Dashb	Completed	Normal	(None)
5892239	OAM Applications Dashb	Completed	Normal	(None)
892238	OAM Applications Dashb	Completed	Normal	(None)
5892237	OAM Applications Dashb	Completed	Normal	(None)
5892236	General Ledger Account	Completed	Normal	SH, 1028107, N
5892235	Compile value set hier	Completed	Normal	1028107
5892234	Verify	Completed	Normal	
5892233	OAM Applications Dashb	Completed	Normal	(None)
Hol	d Request View D	Detail <u>s</u>		View Out <u>p</u> ut
Canc	el Request Diag	mostics	(View Log

4. View information for a specific request by selecting a row and clicking one of the following buttons:

- **View Details**. Opens a window with the details including the name of the program, parameters used, and scheduling options.
- **Diagnostics**. Opens a window with a summary of the migration results. This includes information on whether the migration succeeded with or without errors. Migrations with errors have text indicating the cause or instructions on obtaining more detailed information.
- **View Output**. Displays the migration execution report detailing migrated objects and any error messages. Errors preventing migration are listed here.
- **View Log**. Errors preventing execution are listed here.

The migration output and logs may contain some error messages indicating specific problems. See"Exception Messages" on page 119 for a complete list of error messages and troubleshooting tips.

Auditing Migration Executions

Use the Object Migrator Audit Report program to audit Object Migrator programs, and any migrated objects. When an Object Migrator concurrent program is run, Object Migrator logs information about the request and the specific objects migrated. This information remains available even after concurrent requests have been purged from Oracle E-Business Suite thereby allowing Object Migrator activity to be audited over time.

To run Object Migrator Audit Report:

- Open the Submit Requests window. For example, Other > Requests > Run. Use this form to launch the Object Migrator Audit Report program. This prompts the user for report parameters allowing the user to restrict the audit data.
- 2. Specify values for the following parameters.

Parameter Name	Value
Туре	Request.
Name	Object Migrator Audit Report
Order By	 Select one of the following options: Run Date. Order the Audit Report by the Run Date of the migrator program. Object Type. Order the Audit Report by the object type that was migrated. Within a specific object type, order the report by the program Run Date.

Parameter Name	Value
Run Date From	Type the starting Run Date of the programs to include in the audit report.
То	Type the ending Run Date of the programs to include in the audit report.
Specific Object Type	Type a specific object type to limit the audit report to a specific Object Migrator object type.
Specific Application	Type a specific application to limit the audit report to a specific application (this refers to the destination application in a given migration).
Specific Object	Type a specific object name to restrict the audit report to a specific object (this refers to the destination object name).
Destination Database	Type a specific database to limit the audit report to migrations to a specific database instance.
lgnore Report Only	Select whether or not to include executions of Object Migrator that were run in Report Only mode.

Comparing Objects

Object comparisons are performed using the same program as migrations. Each Object Migrator request includes Compare Only that can be used to compare objects. If Compare Only is specified, no migration is executed.

When Compare Only is set to **Yes**, Object Migrator extracts the object information into temporary tables. It then compares the detailed attributes of the objects and lists the differences in the output report. The report categorizes the differences as follows.

Category	Description
Only in Source Database	The object or object detail exists only in the source database. There is nothing in the destination database with the corresponding object name or object detail name.
Only in Dest Database	The object or object detail exists only in the destination database. There is nothing in the source database with the corresponding object name or object detail name.

Category	Description
Differences Exist	Objects or object details with this status either have differences with their specific attributes or have details where some sort of differences exist.

If an object or object detail has a status of Only in Source DB or Only in Dest DB, then Object Migrator does not report on any details below that object. For example, when comparing a range of concurrent programs on one database against the range on another database, if a concurrent program exists on the source database and not the destination database, it does not report on the parameters belonging to concurrent programs.

Long fields and translated data are not compared in the comparison reports.

Some child entities are not compared, see "Migration Rules and Parameters" on page 82.

Running the Object Comparison

To run the object comparison:

1. Log on to Oracle E-Business Suite.

You need access to a user ID and password for a user account that has the responsibility (access) to use Oracle's Submit Requests window and the Object Migrator programs.

- 2. Open the Submit Requests window.
 - a. From the menu, select **View > Request**.
 - b. Click Submit a New Request.
 - c. Select the **Single Request** radio button.
 - d. Click OK.

The Submit Request window opens.

3. In the **Name** field, select any object.

Only Object Migrator programs to which you have been given access by the application system administrator will be displayed.

The Parameters window opens for the selected object. Parameters vary according to your selection.

4. To compare objects, use the following table as guidance to specify parameters as necessary to achieve the result set you want.

Parameter Name	Compare Objects in Two Databases	Compare Objects in a Database and the Object Archive	Compare Versions of an Object in the Object Archive
Source Database	The first instance containing the object to compare	Object Archive	Object Archive
Destination Database	The second instance containing the object to compare	The name of the database containing the object to compare	Object Archive
Recover From Archive		Yes	Yes
Save to Archive			No
Version Label			The version of the first object to be compared
From Version Label		Select the appropriate label	The second version of the object to be compared

- 5. In the **Compare Only** field, select **1** (Yes) for Compare Only.
- 6. Specify any other parameters required to define the object or objects to compare. For a description of each parameter, see " Migration Rules and Parameters" on page 82.

To compare by individual objects, specify the object to compare. Object Migrator will ignore the value in New Object Name and instead use the value of Specific Object Name when retrieving information.

To compare by a range of objects, specify the range using Object From and Object To. If you specify a range, objects that do not exist on one database will be shown versus another database, and the differences for the objects that do exist on both databases.

If comparing data between releases, you may encounter differences due to changes in the AOL data model between these releases.

- 7. Click **OK**.
- 8. After the objects are compared, the results are displayed in the output report.

Sample Comparison Report

The following parameters were used to construct the example:

- The concurrent program (WIPRELIN) was compared between two applications instances.
- On the destination instance, the following items were manually altered:
 - The **Maximum Columns** field value was removed and the description was changed.
 - A new parameter named New Param was specified.
 - The parameter Org ID was removed.
 - The value set for the parameter Dates To was changed from wIP_ SRS_DATES_OP to FND_DATE.

The following shows the results of comparing these instances.

Concurrent Program Differences Report ** Concurrent Programs ** Action App Program Name Description ---- ---------WIPRELIN Repetitive Line Differences Exist WIP Report Column Name Value From Source DB Value From Dest DB _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ ----------Columns Max 65 Program Long Name Repetitive Line Repetitive Line Report Report ** Parameters ** Action Seq Num Parameter ----------Only in Source DB 7 Org id Only in Dest DB 9 New Param Differences Exist 6 Dates to Column Name Value From Source DB Value From Dest DB ---------------WIP_SRS_DATES_OPT Value Set FND DATE

Maintaining Object Migrator

- "Maintaining Database Links" below
- "Maintaining Value Sets" below
- "Maintaining Object Migrator Views" below
- "Using Object Migrator Custom Views" on page 59
- "Managing Custom Applications" on page 61
- "Purging the Object Migrator Interface Tables" on page 62
- "Purging the Object Migrator Archive Details" on page 64
- "Recompiling the Descriptive Flexfields" on page 65
- "Maintaining the Data Model" on page 65
- "Setting Up Object Migrator Security" on page 65
- "Managing Database Instances" on page 66

Maintaining Database Links

If you change passwords you must keep Object Migrator database links updated.

To maintain database links:

- 1. Drop the appropriate database link.
- 2. Recreating it using the new password.
- 3. Run the Maintain Object Migrator Views program.

Maintaining Value Sets

If you can change databases and database links you must keep the CLM_ DATABASES and CLM_DB_LINKS value sets updated.

For more information, see "Managing Database Instances" on page 66.

Maintaining Object Migrator Views

The Maintain Object Migrator Views program validates and rebuilds the Object Migrator views based on the current values in the CLM_DB_LINKS and CLM_DATABASES value sets, as well as the current status of your remote databases. The program also reports the current definition of these views.

Note: These views are used during parameter selection when running Object Migrator concurrent programs. If any source or destination database enabled

for Object Migrator use is referenced in the view and is unavailable, the Parameter form will return an error and users will be unable to submit requests for the Migrator or Object type.

For more details on the Object Migrator views, see "Using Object Migrator Custom Views" on the next page.

Run this program:

- Periodically on a regular schedule
- After any changes are made to the CLM_DB_LINKS or CLM_DATABASES value sets
- When an Object Migrator source or destination becomes available or unavailable

Note: Some objects are not applicable to all releases of Oracle E-Business Suite. If a particular object is not applicable to a given Oracle instance, the instance will be omitted from the view definition.

To run the Maintain Object Migrator Views program:

- 1. Open the Submit Requests form. For example, **Other > Requests > Run**.
- 2. Query for and launch the **Maintain Object Migrator Views** program. This prompts the user for report parameters, allowing the user to run the program in Report Only mode.

Specify values	for the following parameters.
Parameter Name	Value
Туре	Request
Name	Maintain Object Migrator Views
Report Only	 Select one of the following options: Yes. Do not modify the Object Migrator views. Just report on their current definition.

remote databases.

3. Specify values for the following parameters.

4. Make sure to view the report output of this program. The report will list all the enabled databases for use with Object Migrator and any errors encountered while trying to connect to these databases.

• No. Re-create the Object Migrator views based on the

current enabled values in the CLM_DATABASES and CLM_ DB_LINKS value sets and the current statuses of your

Using Object Migrator Custom Views

Object Migrator uses views to provide a list of values when selecting a specific object to migrate. This list of values is taken from the source database of the migration. These lists of values are based on custom views created and maintained by the Maintain Object Migrator Views program.

The custom views (one per object type) are a series of unions that select from each database defined in the CLM_DATABASES value set. To get to the remote databases, the views use the database links defined in the CLM_DB_LINKS value set. Object Migrator retrieves data from the remote database in real time.

For example, suppose CLM_DATABASES has the following enabled values:

Value Meaning 2 DEV 3 QA 4 PROD 900 Object Archive

CLM_DB_LINKS has the enabled values:

Value Meaning 2 DEV_LINK 3 A_LINK 4 PROD_LINK 900 Object Archive

The view for the Users Migrator would be:

SELECT	2 db_value, user_name object_name
FROM	fnd_user@DEV_LINK
UNION	
SELECT	3 db_value, user_name object_name
FROM	fnd_user@QA_LINK
UNION	
SELECT	4 db_value, user_name object_name
FROM	fnd_user@PROD_LINK

UNION

<select clause to query the Object Archive tables against the local database>

When retrieving a list of values from this view, the Object Migrator program checks at the selected source database and return the values from that database. Where appropriate, the list of values is limited by the source application.

Performance to retrieve the list of values for the first time can be affected by the number of database links that need to be traversed.

Run the "Maintaining Object Migrator Views" on page 57 procedure often to ensure that your database links are valid. Database unions with invalid database links can cause the entire view to become invalid. This results in an error when the Object Migrator program is submitted.

To keep the Object Migrator views current with the current database status, schedule the Maintain Object Migrator Views program to run periodically. We suggest running it daily or weekly.

Switching to Non-Validated Mode

If significant problems are encountered with the Object Migrator views, switch to the non-validated object name mode using CLMSMBS9.sql. To revert back to validated parameters with a list of values, use CLMSMBS8.sql.

To switch to the non-validated object name mode:

- 1. Using SQL*Plus, log on to the Object Migrator database.
- 2. Navigate to the installation directory.
- 3. Run the CLMSMBS9.sql script against the Object Migrator SQL account.
- 4. When you are prompted for inst_value_sets, type Y.

For example:

```
sqlplus <OM_acct>/<OM_password>
SQL> @CLMSMBS9.sql
Enter value for inst_value_sets: Y
Enter value for inst_value_sets: Y
SQL> exit;
```

After you run this script, the object name parameters will have no validation or list of values.

To revert back to validated parameters with a list of values:

- 1. Using SQL*Plus, log on to the Object Migrator database.
- 2. Navigate to the installation directory.
- 3. Run the CLMSMBS8.sql script against the Object Migrator SQL account.
- 4. When you are prompted for inst_value_sets, type Y.

For example:

```
sqlplus <OM_acct>/<OM_password>
SQL> @CLMSMBS8.sql
Enter value for inst_value_sets: Y
Enter value for inst_value_sets: Y
SQL> exit;
```

open_links Database Parameter

The open_links database parameter controls the number of different databases that can be accessed through database links in a given session. It does not control how many times a specific link can be used in that session.

The default value for this parameter is 4. The suggested value is 20.

If you expect more than four databases defined in CLM_DATABASES, the value for this parameter needs to be increased in the Object Migrator instance.

To change the open_links parameter:

- 1. Stop the database.
- 2. Modify the init.ora file by adding (or modifying) the line:

open_links=20

3. Restart the database.

Managing Custom Applications

The parameter selections for application parameters of Object Migrator concurrent programs (for example, source application or destination application) are taken from the instance where Object Migrator is installed, not directly from the source or destination instance.

Register each custom application for which data will be migrated. Otherwise, Object Migrator will be unable to migrate data for the application.

Object Migrator identifies applications by their application short name, not by the user application name.

To register each application where data will be migrated to or from:

- 1. Start Oracle E-Business Suite from the Object Migrator instance.
- 2. Navigate to the register form. For example, **Application > Register**.

Application Accounts Payable	Short Name XXAP	Basepath XXAP TOP	Description Corp Accounts Payable	
Purchasing System	XXPO	XXPO_TOP	Corp Purchasing	

The following is an example of registering custom applications.

Purging the Object Migrator Interface Tables

To maintain data processing efficiency, periodically purge the temporary Object Migrator tables using the Purge Object Migrator Interface Tables program. You can:

- Truncate the Object Migrator tables
- Delete records older than a certain date
- Purge particular object types

This clean up is only necessary for executions of the Object Migrator in Debug mode. If Debug is set to No, Object Migrator removes all records inserted into its temporary tables during the execution of the program.

To remove any fragmentation created through the insertion and deletion of records in the temporary tables, run this program at least once a month with Truncate Table set to Yes and all migrators selected.

To protect data integrity during migrations, the Object Migrator installation program automatically defines incompatibilities such that migrations cannot run while interface tables are being purged.

To run the Purge Object Migrator Interface Tables program:

- Open the Submit Requests window. For example, Other > Requests > Run. Use this form to launch the Purge Object Migrator Interface Tables program. This will prompt the user for report parameters to restrict the tables to purge.
- 2. Specify the following parameters.

Parameter Name	Value
Туре	Request
Name	Purge Object Migrator Interface Tables
Truncate Tables	 Select one of the following options: Yes. Purge the tables by truncating them. This removes all the records from the table and removes and table fragmentation. Note that records cannot be selectively deleted based on age if this parameter is set to Yes. Unless there are reasons to retain records, set this parameter to Yes. No. Purge the tables by deleting rows from the table.
Days Old	Type the least number of days old the records need to be in order to be eligible for deletion. This parameter is only relevant if Truncate Tables is set to No .
Conc Prog Migrator Tables	Indicate if the tables used by the Concurrent Programs Migrator will be purged.
Rep Set Migrator Tables	Indicate if the tables used by the Report Sets Migrator will be purged.
Value Set Migrator Tables	Indicate if the tables used by the Value Sets Migrator will be purged.
Desc Flex Migrator Tables	Indicate if the tables used by the Descriptive Flexfields Migrator will be purged.
Request Group Migrator Tables	Indicate if the tables used by the Request Groups Migrator will be purged.
Menu Migrator Tables	Indicate if the tables used by the Menus Migrator will be purged.
Responsibility Migrator Tables	Indicate if the tables used by the Responsibilities Migrator will be purged.
User Migrator Tables	Indicate if the tables used by the Users Migrator will be purged.

Parameter Name	Value
Profile Options	Indicate if the tables used by the Profile Options
Migrator Tables	Migrator will be purged.
FSG Row/Column Set Migrator Tables	Indicate if the tables used by the FSG Row/ Column Sets Migrator will be purged.
QuickCode Migrator Tables	Indicate if the tables used by the QuickCodes Migrator will be purged.
GUI Menu Migrator	Indicate if the tables used by the GUI Menus
Tables	Migrator will be purged.
Function Migrator	Indicate if the tables used by the Functions
Tables	Migrator will be purged.
Printer Migrator Tables	Indicate if the tables used by the Printer Definitions Migrator will be purged.
Folder Migrator Tables	Indicate if the tables used by the Folders Migrator will be purged.
Message Migrator	Indicate if the tables used by the Messages
Tables	Migrator will be purged.
Concurrent Manager	Indicate if the tables used by the Concurrent
Migrator Tables	Manager Definitions Migrator will be purged.

Purging the Object Migrator Archive Details

Data accumulates in the Object Migrator archive tables as different versions of various object types are archived. Over time, the volume of this data can become considerable.

To save storage space and increase report efficiency, maintain the revision history of the objects, but purge the actual details of the older versions of objects that will never be used for migration or comparison. Archive data can also be purged to remove object versions that were incorrectly archived.

Use the Purge Object Archive Version program to purge entire archives (by Archive label) or subsets of an archive, selecting by object type or object name. The Object Migrator installation program automatically defines incompatibilities such that migrations cannot run while interface tables are being purged. This is to protect

data integrity during migrations. For additional details on running this program, see "Purging the Object Archive" on page 71.

Note: The ability to compare against or revert to these purged versions will be lost after the purge program is executed.

Recompiling the Descriptive Flexfields

Oracle recommends that the descriptive flexfields be recompiled periodically. To do this, at the file system level, run the following command:

```
$FND_TOP/bin/fdfcmp apps/<Apps_Passwd> 0 Y
```

Note: The syntax may vary in different Oracle E-Business Suite releases.

Maintaining the Data Model

If the Object Migrator database uses cost-based SQL optimization, you should periodically gather statistics on the Object Migrator schema. The required frequency depends on the volume of data being migrated, especially archivals, and the number of submissions requested. You should also adjust table sizing to reflect your style of usage of Object Migrator.

Setting Up Object Migrator Security

Object Migrator uses standard Oracle E-Business Suite security functionality to control access to Object Migrator programs. "Configuring Your System to Work with Object Migrator" on page 27 provides some default security setup information. Beyond this default security setup, you may want to consider additional internal security for Object Migrator. Your security tasks might include the following:

• **Request groups**. Set up a request group for each grouping of programs if there are different groups of users who should access different sets of programs.

System administrators might have access to all programs, however business analysts and developers have access only to migrator and archive programs.

- **Responsibilities**. For each grouping of programs, set up a custom responsibility for the user group that will access the group of programs. See "Optional Configurations for Object Migrator" on page 38 for detailed examples.
- **Users**. The Oracle E-Business Suite instance where Object Migrator is installed needs to have a logon defined for each user who will submit Object Migrator requests (this is optional if integrating with Deployment Management). Create

the user and assign the appropriate responsibility that includes Object Migrator programs.

Managing Database Instances

- "Adding a New Database Instance" below
- "Removing a Database Instance" below

Adding a New Database Instance

New database instances can be registered for use by Object Migrator, either as a source or destination for object data.

To register a new database instance:

- On the Object Migrator instance, define a database link from the Object Migrator SQL account to the APPS account of the new database instance.
 For examples, see "Configuring Your System to Work with Object Migrator" on page 27.
- 2. Ensure that your tnsnames.ora file includes all the databases in your Object Migrator environment.
- 3. Ensure that you have properly updated database links.
- Add a value to the CLM_DATABASES value set for the new database instance. For examples, see "Configuring Your System to Work with Object Migrator" on page 27.
- 5. Add a value to the CLM_DB_LINKS value set for the new database link. Use the exact database link name for the description.

Use the same number in the **Value** field that the database is assigned in the CLM_DATABASES value set. For examples, see "Configuring Your System to Work with Object Migrator" on page 27.

- 6. Run the Maintain Object Migrator Views Concurrent program to:
 - Re-create all the object views used by Object Migrator for inclusion of the new database.
 - Perform a validation check for all enabled database names and links.

Removing a Database Instance

Object Migrator configurations should be updated when an Oracle E-Business Suite instance will no longer be used as a source or destination of migrations. For example, when a test instance is removed.

To remove a database instance:

- 1. Query the value for the instance in the CLM_DB_LINKS value set and disable the instance.
- 2. Query the value for the instance in the CLM_DATABASES value set and disable the instance.
- 3. Remove the database link from the Object Migrator database schema.
- 4. Run the Maintain Object Migrator Views Concurrent program. This re-creates all the object views used by Object Migrator and no longer includes the obsolete Oracle E-Business Suite instance.

Using Version Control

- "Archiving AOL Object Definitions" below
- "Running the Object Archive Version Detail Report" on the next page
- "Purging the Object Archive" on page 71

Archiving AOL Object Definitions

Object Migrator stores object information in the object archive. This preserves a version of the object definitions for future uses, including reapplying the definition to a database instance, comparing to other versions, or historical reporting.

For information on comparing archived objects to objects in other instances, see "Comparing Objects" on page 53.

Saving an Object to the Object Archive

To save an Object Migrator supported objects to the object archive:

1. Using the Submit Request window, create a new request for an object migration.

The Parameter window opens for the selected object type. For example, if you select **Migrate Descriptive Flexfields**, the window will display the fields required to migrate descriptive flexfields.

- 2. Select the following options related to the object archive:
 - Dest Database = **Object Archive**
 - Save to Archive = **Yes**
- 3. In the **Version Label** field, specify the version label for the object.

If you specify a new version label, Object Migrator will create the label for you. If you select an existing version label, the object will be archived with other objects with the same label.

Only one revision of a given object (such as a particular concurrent program) can exist within a given archive label.

- 4. In the Version Desc field, type an optional description of the object version. This value will also be the description for the version label if this is a new version label. If this field is left blank and the version label already exists, Object Migrator will use the description of the version label as the description of the object versions.
- 5. Specify any other parameters required to define the migration. See " Migration Rules and Parameters" on page 82.
- 6. Click **OK**.

The object is saved to the object archive. To find out if the objects were successfully saved, view the migration results.

Retrieving an Object from the Object Archive

To restore an archived object definition to an instance, retrieve objects that were previously archived using the following procedure.

To retrieve an Object from the object archive:

1. Using the Submit Request window, create a new request for an object migration.

The **Parameter** window opens for the selected object type. For example, if you select **Migrate Descriptive Flexfields**, the window will display the fields required to migrate descriptive flexfields.

- 2. Select the following options related to the object archive:
 - Source Database = **Object Archive**
 - Save to Archive = **No**
 - Recover from Archive = **Yes**
 - Dest DB = <database instance to which the object will be restored>
- 3. In the **From Version Label** field, select the version of the object to retrieve.
- 4. Specify any other parameters required to define the migration. For a description of the parameters, see "Migration Rules and Parameters" on page 82.
- 5. Click OK.

The previous object definition in the destination is replaced with the definition from the archive. To find out whether the objects were successfully migrated, view the migration results.

Running the Object Archive Version Detail Report

The Object Archive Version Detail Report audits the contents of the object archive and displays the revision history of your AOL objects. You can run this report from the Oracle E-Business Suite Submit Requests window.

To run the Object Archive Version Detail Report:

- 1. Open the Submit Request window.
- In the Name field, select Object Archive Version Detail Report.
 The Parameter window opens for the request.

Object Migrator Guide and Reference Using Version Control

•Parameters	
Order By 🚺 🔐 Creation Date	
Version Label	
Specific Object Type	
Application	
Object Name From	
Object Name To	
Creation Date From	
Creation Date To	
Specific User	
	QK Clear Help

3. To limit the report results, type the relevant report parameters.

The following table lists and defines the Object Migrator common parameters used with Object Archive Version Detail Report.

Parameter Name (*Required)	Description
Order By *	 Select one of the following: Date. Order the report by the object creation date. Version Label. Order the report by version label name. Object Name. Order the report by object type, object name
Version Label	Limit the report by a specific version label in the object archive.
Object Type	Limit the report by a specific object type (concurrent program, value set, and so forth).
Application	Limit the report by a specific application.
Object Name From	Type the starting object name to include in the report.
Object Name To	Type the ending object name to include in the report. Set this equal to the Object Name From to report on a single object.
Creation Date From	Limit the report with object versions saved into the object archive after or equal to this date.

Parameter Name (*Required)	Description
Creation Date To	Limit the report with object versions saved into the object archive before or equal to this date.
Specific User	Limit the report by the user who created the version.

4. Click **OK**.

The report runs according to the specified parameters.

5. To view the report after the request completes, click **View Output**.

Purging the Object Archive

The Purge Object Archive Versions program purges information from the AOL object archive. Use the purge functionality to remove old versions of objects that will never be used or to remove object versions that were incorrectly saved to the object archive. Run this report from the Oracle E-Business Suite Submit Requests window.

Note: To run this program, you must have access to the program given by the system administrator.

To purge the object archive:

- 1. Open the Submit Request window.
- 2. In the Name field, select Purge Object Archive Versions.

The Parameter window opens for the request.

• Parameters	×
Report Only 1 Yes	
Version Label	
Specific Object Type	
Application	
Object Name From	
Object Name To	
Creation Date From	
Creation Date To	
Version Details Only <mark>2</mark> No	
	QK Clear Help

3. To limit the report results, type the relevant report parameters.

Parameter Name (*Required)	Description
Order By *	 Select one of the following: Yes. Report on the versions that would get purged but do not execute the actual purge process. No. Execute the purge process in addition to reporting on the versions that will get purged.
Version Label	Limit the data to purge by a specific version label in the object archive.
Object Type	Limit the data to purge by a specific object type (concurrent program, value set, and so forth).
Application	Limit the data to purge to a specific application.
Object Name From	Type the starting object name to include in the purge. This parameter is case sensitive.
Object Name To	Type the ending object name to include in the purge program. Set this equal to the 'Object Name From' to report on a single object.
Creation Date From	Limit the data to purge to object versions saved into the object archive on or after this date.
Creation Date To	Limit the data to purge to object versions saved into the object archive before or on this date.
Version Details Only *	 Select one of the following options: Yes. Purge the details of the object in the object archive but do not purge the version itself. This allows for the reporting on the revision history of an object without having to store all the information for older version you will never recover from or compare against. After the details have been purged, you will not be able to ever use this object version as a source for migrations or as a version to run comparisons against. No. Remove the object version as well as the details for the object. Use this setting only if you want to remove all record of the object versions from the object archive.
4. Click **OK**.

The report runs according to the specified parameters.

5. To view the report after the request completes, click **View Output**.

Using Object Migrator with PPM Deployment Management

- "Using Object Migrator with PPM Deployment Management Overview" below
- "Running Object Migrator from PPM Deployment Management" below
- "Processing Packages in PPM Deployment Management" on page 76

Using Object Migrator with PPM Deployment Management Overview

Object Migrator can be run from PPM Deployment Management.

PPM Deployment Management is designed to automate the deployment of technology solutions. Business system components created or modified by an initiative are grouped into Deployment Management packages. These packages have workflows associated with them that automate the process of moving each package through required steps, which typically involve system build, testing, quality assurance, staging, and final deployment. Deployment Management automatically deploys the application components necessary for each package.

For example, this software will connect to the development environment, copy SQL scripts from the version control repository and transfer the files to the quality assurance environment. It will then use SQL*Plus to load the stored procedures defined in the SQL script. A built-in scheduler allows the customer to schedule deployments. Deployment Management maintains an audit trail for all activities including package information, application components altered, approvals obtained and deployments performed.

For more information, see:

- Deployment Management User Guide
- System Requirements and Compatibility Matrix

Running Object Migrator from PPM Deployment Management

Object Migrator migrations can be run directly through Deployment Management after the PPM Extension for Oracle E-Business Suite has been installed and configured. The Extension includes a pre-defined object type for each type of object migrated using Object Migrator. As part of the Extension configuration, the PPM Center administrator will have set up the appropriate workflows to control data migrations and enforce promotion rules such as testing approvals. The Extension includes best practice sample workflows for this purpose.

In Deployment Management, users create package lines that specify the migration of AOL objects. Package lines that include AOL objects call Object Migrator to execute the migration. Packages in Deployment Management can contain a mix of AOL and non-AOL package lines, which enables related code to migrate together with its configurations.

To create a package to migrate AOL objects in Deployment Management:

- 1. Open the PPM Workbench. See the *Getting Started* guide for details.
- 2. From the shortcut bar, select **Change Mgmt > Packages**.
- 3. In the Package Workbench, click **New Package** to create a new package. The Package window opens.
- 4. Complete the fields in the **Package Information** section.
- 5. Click the **New Line** button on the Package window.

The Add Line window opens, displaying a list of object types that can be used.

6. In the **Object Type** field, select the object type to be migrated.

The Add Line window refreshes to display the parameters required to migrate the specific object. For a description of each parameter, see "Migration Rules and Parameters" on page 82. Both the application name and the specific object name are validated against the source environment in the workflow. The version label and version description are used only if the workflow is configured to use the object archive. The source and destination environments are designated by the workflow. Object Migrator Guide and Reference Using Object Migrator with PPM Deployment Management

Object Type In	formation —			
Object Type:	AOL:Conc Pr	og		I
Sequence:	1	Application C	ode: None	*
Parameters	User Data			
Source	Application:	CLM		Ē
Se	lection Type:	Specific Object		•
Co	nc Program:	CLMRMCM1		Ē
New User Program Name:		CLMRMCM1_B	AK	
Conc Program From:				
Conc	Program To:			
Ve	ersion Label:			
V	ersion Desc:			
Overw	rite if Exists:	Yes	◯ No	
Partials Allowed:		O Yes	No	
Clear			OK	Concel
Clear			OK Apply	Cancel

- 7. Click **OK** to save the package line.
- 8. Specify the parameters to describe the object.

After the package line has been typed and the package submitted, the AOL object moves through the workflow like any other package line in Deployment Management.

Processing Packages in PPM Deployment Management

Once eligible, users can migrate the selected objects to the destination environment. When an action step in a workflow is executed, Deployment Management submits a concurrent request to run Object Migrator. It prints the concurrent request ID for the package line and displays the status of the concurrent request after it completes. Object Migrator Guide and Reference Using Object Migrator with PPM Deployment Management

🔮 Paci	kage: 30070						4 Q X
- ackay	Package No.: 300	70	Package Group:		Created By:	Admin User	
	Workflow: OM	_DEV78_QA05_PR	20D36		Package Status:	In Progress	
A	ssigned User:		Priority: Low	· •	Parent		
As	signed Group:		Package Type: Cus	stomization -	Priority Seq:	50	
Packa	ge Lines Status	🗉 Notes 🗉	References User Data				
Seq	Object Name	Object Type	1 Approve (From DEV to QA)	2 Migrate from DEV to	QA Reti	3 y? (From DEV to QA)	4 Approve (from
1	CLMRMCM1	AOL:Conc Prog	Approved	Succeeded [ConcReq:59	932125]		Eligible
Refresh Select All Law View -> Line Exect on (Latest) - Refr? (From OA to PROD)							
L L L D T C D C						A ID PRUDAT	

When migrating multiple AOL Object request lines, Deployment Management automatically runs the concurrent requests serially based on object dependencies. As an additional feature, the report output of the Object Migrator concurrent request can be viewed directly from Deployment Management Package window by selecting the log file from the drop-down list in the **Status** tab and clicking **View**.

For more information, see the Deployment Management User Guide.

Appendix 2: AOL-Dependent Objects

"Table A-1. AOL object migrated by Object Migrator" below lists the dependent object for each of the AOL objects migrated by Object Migrator. # represents items that Object Migrator will not migrate.

Table A-1. AOL	object mig	rated by Ob	ject Migrator
----------------	------------	-------------	---------------

Object	Dependencies (Migrated)	Dependencies (Not Migrated)
Concurrent Programs	Executables	Value Sets
		Application #
		Security Groups #
		Resource Consumer Groups #
		Concurrent Request Types #
		Request Sets
		Executable Types #
		Profile Options
Concurrent Manager	Work Shifts	Application #
	Specialization Rules	User
		Oracle User #
		Conc Program
		Request Type #
		Program Library #
		Security Group #
Value Sets	Value Sets (parent)	Security Group #

Object	Dependencies (Migrated)	Dependencies (Not Migrated)
Descriptive Flex Fields		Value Sets
		Profiles
		Application #
		Tables #
		Security Groups #
Request Groups (Report Groups)		Concurrent Program
		Request Set
		Application #
Menu	Submenus (optionally migrated)	Application #
		Forms #
	migrated)	Subroutines #
		Macros #
Responsibility		Request Group
		Menu (Char/GUI)
		Forms (Character only)#
		Data Groups #
		Application #
		Form Functions (for exclusions)
		Inventory Org #
		Security Group #
		Attributes #

Object	Dependencies (Migrated)	Dependencies (Not Migrated)
Users		Responsibilities
		Employees #
		Customers #
		Suppliers #
		Security Groups #
		Security Attributes #
GUI Menu	Submenus	Functions
	(optionally migrated)	Security Groups #
Folders		Users
		Responsibilities
FSG Row/Col Sets (For Oracle E-		Set of Books #
Business Suite Release 11i only)		Standard Axes #
Functions	Form Definition	Application (form) #
		Objects #
		Region Application s#
		Region Codes #
Messages		Application #
Printer Definitions	Printer Types	Platforms #
	Printer Drivers	
	Printer Styles	
Profile Options		Users
		Responsibilities
		Application#

Object Migrator Guide and Reference Appendix 2: AOL-Dependent Objects

Table A-1. AOL object migrated by Object Migrator, continued

Object	Dependencies (Migrated)	Dependencies (Not Migrated)
Quick Codes		Application #
Request Sets (Report Sets)		Application # Concurrent
		Program
		Request Set Stage Function #

Appendix 2: Migration Rules and Parameters

- "Common Migrator Parameters" below
- "Concurrent Managers" on page 92
- "Concurrent Programs" on page 93
- "Descriptive Flexfields" on page 95
- "Folders" on page 97
- "FSG Row/Column Sets" on page 99
- "Functions" on page 100
- "GUI Menus" on page 101
- "Messages" on page 103
- "Printer Definitions" on page 104
- "Profile Options" on page 105
- "QuickCodes (AOL)" on page 107
- "Request Groups (Report Groups)" on page 108
- "Request Sets (Report Sets)" on page 109
- "Responsibilities" on page 110
- "Users" on page 113
- "Value Sets" on page 117

Common Migrator Parameters

"Table B-1. Object Migrator common parameters" on the next page lists and defines the parameters, in alphabetical order, that are common to most Object Migrator object types.

Parameter Name	Required?	Description
Compare Only	Yes	Specifies whether to compare objects between instances. Options are:
		 Yes. Compares a specific object or a range of objects from two instances. Does not migrate any data.
		 No. Does not run the program object comparison mode.
		The comparison functionality does not compare column information, extended items, or securing attributes. For more information, see "Comparing Objects" on page 53.
Dest Application	Yes	Short name of the application in the destination database to own the object after migration. This defaults to the application chosen as the source application. The list of applications comes from the database where Object Migrator is installed. If the desired application does not appear in the list, contact your system administrator.

Parameter Name	Required?	Description
Dest Database	Yes	The database to which objects are migrated. For object types that allow renaming, this can be the same as the source database, but is typically not the same. If the desired destination database is not an option on the list, contact your system administrator to have the database name added to the appropriate value set. To migrate the objects into the object archive rather than to another Oracle E- Business Suite instance, select Object Archive .
		In general, the source and destination databases do not need to be on the same Oracle E-Business Suite release because Object Migrator takes care of cross-release migration logic. There are exceptions in some specific migrators where object types become obsolete or where other data model differences preclude cross-reference migration.
From Version Label	No	The version label name of the objects that will be recovered from the object archive. This parameter is used with Recover From Archive. When trying to recover a specific object, select from all the valid version labels for that object. When recovering a range of objects, select from all version labels that have at least one object of the object type (such as concurrent program and value set) to recover.
		This parameter is also used when comparing two versions of the same object.
		For more information, see "Running the Object Comparison" on page 54.

Table B-1. Object Migrator common parameters, continued

Parameter Name	Required?	Description
New < <i>Object_</i> <i>Type></i> Name	No	The name to give the object in the destination database after migration.
		Default value is the object name from the source database.
		Accept the default or modify the value. This parameter is used only when Specific Object is selected in the Selection Type field.
New User <i><object_< i=""> <i>Type></i> Name/Title</object_<></i>	No	Some object types require that the user names and titles be unique within a given application. You can change the user name or title of the object during the migration process. This is especially useful when duplicating an object.
		This field is only used if Specific Object is selected from the Selection Type field. If left blank, Object Migrator uses the user name from the source database.
<object_ Name> From</object_ 	No	The beginning of the object name range to migrate. This field is used with the To field (which specifies the end of the range) when migrating a range of objects. Object Migrator performs an alphabetic search using this parameter so the value does not have to be an exact object name. For example, to migrate all objects for a given application, migrate from A to zzz.
		The range match is case sensitive.
		If objects exist that do not begin with characters, then use from exclamation point (!) to tilde (~) to get all objects.
		This parameter is used only when Range of Objects is selected in the Selection Type field.

Table B-1. Object Migrator common parameters, continued

Parameter Name	Required?	Description
<object_ Name> Like</object_ 	No	Type the character string to match against when migrating objects based on a wild card match. Use the percent sign (%) as the multi- character wild card character and the underscore (_) as the single-character wild card character. Object Migrator limits the objects to migrate to object names that match this character string. This wild card match is case sensitive.
		This parameter is used only when Wild Card Match is selected in the Selection Type field.
Overwrite if Exists	Yes	Specifies whether to overwrite object definitions that already exist in the destination databases. Options are:
		• Yes. If the objects being migrated already exists in the destination database and the destination application, overwrite the objects definition with the new definition. When migrating and renaming a specific object, use the value of <i><object_type></object_type></i> Name as the object name to check against.
		 No. If the objects being migrated already exists in the destination database and

destination application, then the object will not be overwritten. The migration will fail and

indicate the reason in the output report.

Table B-1. Object Migrator common parameters, continued

Parameter Name	Required?	Description
Partials Allowed	Yes	Specifies whether migrations can proceed when portions of the migration fail. Options are:
		• Yes. If the object passes validation but any of the components fail validation, then the failed components are logged as failed in the error report, but migrations for the components that pass validation continue.
		• No . If any of the components of the object fail validation, then the entire object is failed and the error report will:
		 Log the failing components as having failed
		 Log the object as having failed due to a component failure
		 Log the components non-failing components as having failed due to an object failure.
		Objects are evaluated individually when migrating multiple objects (using range or wild card selection). The failure of one object will not prevent migration of other objects.
Recover From Archive	Yes	Specifies whether to use the object archive as the source database. Options are:
		Yes . Use the object archive as the data source for the migration.
		No . Do not use the object archive as the data source for the object migration.
		This parameter should be set to Yes if Object Archive is selected in the Source Database and should be set to No if the Source Database is not Object Archive.

Table B-1. Object Migrator common parameters, continued

Parameter Name	Required?	Description
Report Only	Yes	Specifies whether Object Migrator should simulate the migration or perform the actual migration. Options are:
		• Yes. Does not import the data after being extracted from the source and validated. Reports "would be" successes and exceptions in the same format as the standard report.
		 No. Imports all objects that pass validation. Reports successes and exceptions as normal.
		Report Only must be set to No if Compare Only is set to Yes or if the Destination Database is set to Object Archive.
Save To Archive	Yes	Indicates whether to save an object to the object archive, preserving the version for reference or later use. Options are:
		• Yes. Put the objects being migrated under version control and store them in the object archive. You can save to the archive when performing a regular migration to an Oracle E-Business Suite instance, or specify the object archive as the destination database.
		• No . Do not store the objects being migrated into the object archive.
		This parameter cannot be set to Yes if Report Only or Compare Only is set to Yes .

 Table B-1. Object Migrator common parameters, continued

Parameter Name	Required?	Description
Selection Type	Yes	Indicates whether to migrate one or multiple objects. Options are:
		 Specific Object. One object will be selected for migration. Type the specific object name in the specific <<i>Object_Name></i> field (for example, specific concurrent program).
		 Range of Objects. A range of objects will be selected for migration. Specify the alphanumeric range to use in the <object_ Name > From and To fields. The range parameters are case sensitive.</object_
		• Wild Card Match. Multiple objects will be migrated with object names matching a specified string. The percent sign (%) will be used as a wild card in this string. Specify this character string to match against in the <object_name> Like field. The wild card parameters are case sensitive.</object_name>
		When migrating multiple objects (range or wild card), the migration fails if no objects can be migrated successfully, but succeeds if even one object is migrated. Always review the request output carefully.
Source Application	Yes	Short name of the application that owns the object in the source database that you want to migrate. For example, GL or OM.
		The valid list of applications comes from the database where Object Migrator is installed. If the desired application does not appear on the list, contact your system administrator.

Table B-1. Object Migrator common parameters, continued

Parameter Name	Required?	Description
Source Database	Yes	The database where the objects to be migrated currently exist.
		If the desired source database is not an option on the list, contact your system administrator to have the database name added to the appropriate value set.
		If using an archived version of the objects as the source data for the migration, select Object Archive as the source database.
		The source and destination databases do not need to be on the same Oracle E-Business Suite release. Object Migrator takes care of cross-release migration logic. There are exceptions in some specific migrators where object types become obsolete or where other data model differences preclude cross- reference migration
Specific <i><object_< i=""> <i>Type></i> [Name]</object_<></i>	When Selection Type = Specific Object	The name of the object to migrate, typically the short name or code. This value is used (with the application value, if it is defined) to uniquely identify the object to migrate. For example, XXWIPDJPCK.
		This field is required if Specific Object is selected in the Selection Type field. If Range of Objects is selected in the Selection Type field, do not type a value in this field.

Table B-1. Object Migrator common parameters, continued

Parameter Name	Required?	Description
То	No	The end of the object name range to migrate. This field is used with the <i><object_name></object_name></i> From field. Object Migrator performs an alphabetic search using this parameter so the value does not have to be exact.
		For example, to migrate all objects for a given application, migrate from A to zzz.
		If objects exist that do not begin with characters, then use from exclamation point (!) to tilde (~) to get all objects.
		This parameter is only used when Range of Objects is selected in the Selection Type field.
Version Description	Version Description	This field should be typed only if Save To Archive is set to Yes .
		The description to attach to the object versions as they are stored in the object archive. This value is also the description for the version label if this is a new version label.
		If this field is left blank and the version label already exists, the Object Migrator uses the description of the version label as the description of the object versions.
Version Label	When Save to Archive = Yes	A version label is required if Save To Archive is set to Yes . The version label name for objects saved into the object archive. If a new version label is specified, Object Migrator creates the label. If an existing version label is specified, Object Migrator adds the objects to the existing label. This parameter is also used when comparing two versions of the same object. For more information, see "Running the Object Comparison" on page 54.

Table B-1. O	bject Migrator o	common	parameters,	continued
--------------	------------------	--------	-------------	-----------

Concurrent Managers

This migrator migrates the definition of the concurrent manager as well as all associated work shifts and specialization rules.

When migrating to an Oracle E-Business Suite Release 12 destination, the

Concurrent Programs migrator submits the following concurrent requests:

- Build Concurrent Request Queue View
- Verify

Before Migrating Concurrent Managers

Before migrating Concurrent Managers, you need to ensure the following tasks are complete:

- 1. If the following entities are referenced by the Concurrent Managers in the source database, ensure that they exist in the destination database prior to the migration.
 - Concurrent program, application, or complex rule referenced by a migrated specialization
 - User referenced by a migrated specialization rule or complex rule
 - Oracle ID referenced by a migrated specialization rule or complex rule
 - Request type referenced by a migrated specialization rule or complex rule
 - Program library
 - Security groups
 - Concurrent Manager type
- 2. Any programs referenced by a migrated complex rule must include both an application and program entry if the destination is Release 11 or later.
- 3. Ensure the concurrent manager on the destination database is deactivated. The Concurrent Manager Definitions Migrator migrates only new concurrent managers or managers that are not active on the destination database.
- 4. Ensure you have a backup of all work shift and specialization rules from the destination database.

The Concurrent Manager Definitions Migrator migrates all work shifts and specialization rules attached to the migrated Concurrent Manager thus overwriting the definition of the work shift or specialization rule if it already exists on the destination database.

5. The type defined for the Concurrent Manager must be supported in the destination database. Migration from newer to older releases is prevented for

certain predefined services, such as Apache JServer, if the data source and the values in the destination are not compatible with those in the source.

Concurrent Managers Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Concurrent Manager request.

Only the object-specific parameters are defined here. For more information about the common Object Migrator parameters, see "Table B-2. Concurrent Manager Definitions Migrator parameters" below.

Parameter Name	Description
Specific Conc Manager Name	Type the source Concurrent Manager name of the Concurrent Manager to migrate. Query this uppercase-only value from the Define Concurrent Manager form.
New Conc Manager Name	Type a new name for the Concurrent Manager, if desired. Otherwise, the name from the source instance is used.
New Description	Optionally, type a new description for the Concurrent Manager.

Table B-2. Concurrent Manager Definitions Migrator parameters

Concurrent Programs

This migrator migrates concurrent program registration and the executable definitions referenced by the concurrent program.

Before Migrating Concurrent Programs

Before migrating concurrent programs, you need to:

- 1. Ensure that if the following entities are referenced by the concurrent program in the source database, that they exist in the destination database prior to the migration:
 - Concurrent request types
 - Executable types MLS application and executable
 - Profile options
 - Request sets
 - Resource consumer groups

Object Migrator Guide and Reference Appendix 2: Migration Rules and Parameters

- Security groups
- Value sets
- 2. If there are any incompatible programs defined in the source instance, then those concurrent programs should either be present in the destination instance or, when Mig Incomp Partially is set to **No**, should be migrated together. For details about this parameter, see "Table B-3. Concurrent Programs Migrator parameters" below.
- 3. Some patch levels of the Oracle E-Business Suite Release 11i require each incompatibility defined for a concurrent program to be qualified by an incompatibility type, that determines the scope within which incompatibilities are evaluated by Concurrent Managers.

Incompatibilities can be evaluated within a specific conflict domain, or globally across all conflict domains. The Concurrent Programs Migrator migrates the incompatibility type if the destination supports incompatibility types. If incompatibility types are used in the destination but not in the source, the Object Migrator defaults the incompatibility type for the program incompatibility based on the same logic Oracle uses during upgrades.

Concurrent Programs Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Concurrent Programs request.

Only the object-specific parameters are defined here. For more information about the common Object Migrator parameters, see "Common Migrator Parameters" on page 82.

Parameter Name (*Required)	Description
Specific Conc Program	Type the short name of the concurrent program to migrate. Query this uppercase-only value from the Define Concurrent Programs form.
	For a description of this common parameter, see "Common Migrator Parameters" on page 82.
	For example, FNDSCARU is the short name for the Active Users report.
New Conc Program Short Name	Accept the default or type a new concurrent program name. For a description of this common parameter, see "Common Migrator Parameters" on page 82.

Table B-3. Concurrent Programs	Migrator parameters
--------------------------------	---------------------

Parameter Name (*Required)	Description
New User Program Name	Accept the default value that is derived from the source database or type a new value. The value is given to the object on the destination database. If left blank, Object Migrator uses the user name from the source database. For a description of this common parameter, see "Common Migrator Parameters" on page 82.
Conc Program Like	Type a search string to match by concurrent program short name. For a description of this common parameter, see <object name=""> Like in "Common Migrator Parameters" on page 82.</object>
Mig Incomp Partially * (Parameter may not be displayed)	 Specifies the treatment of incompatibilities during migration. Select one of the following: Yes. If incompatibilities exist for the program which cannot be mapped to the destination, leave those incompatibilities out without error. No. All incompatibilities defined in the source must exist in the destination in order for the execution to succeed.

 Table B-3. Concurrent Programs Migrator parameters , continued

Descriptive Flexfields

Before Migrating Descriptive Flexfields

Before migrating descriptive flexfields, you need to:

- 1. Ensure that if the following entities are referenced by the descriptive flexfields in the source database, that they exist in the destination database prior to the migration:
 - Profile options
 - Value sets
 - Security groups
- 2. Ensure that the following is true:

- Owning Table of the descriptive flexfield in the source database exists, and is registered to the same application in the destination database.
- The application owning the table that owns the flexfield in the source database must exist in the destination database with the same application short name.
- The form that uses the flexfield in the source should be the same as the form that uses the flexfield in the destination. This is not validated.
- Table structures that own the descriptive flexfield being migrated should be the same in the source and destination databases. This is not validated.
- Any SQL statements used in descriptive flexfields being migrated should be valid in the destination database. This is not validated.
- Columns referenced by the flexfield in the source must be registered in the destination database, and should not be used by a different flexfield in the destination instance. This is validated.
- The flexfield in the destination (if it exists) should not be protected. This is validated.
- If not migrating disabled contexts, the default context must be enabled in the source.
- The title of flexfields being migrated should not exist on another flexfield for the same application. This is validated.
- Be sure that existing transaction data relating to the flexfield in the destination remains valid. The migration replaces the definition in the destination, which can remove or change the value set for existing segments and contexts.

Descriptive Flexfields Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Descriptive Flexfields program.

Parameter Name	Description				
Specific Desc Flex	Type the name of the descriptive flexfield to migrate. Query this uppercase-only value from the Register Descriptive Flexfields form. This is not the title from the Define Descriptive Flexfield Segments form.				
	For a description of this common parameter, see "Table B-1. Object Migrator common parameters" on page 83.				
Disabled Contexts	 Specifies whether to migrate descriptive flexfields contexts that are disabled in the source. Select one of the following: Yes. All contexts from the source, including disabled contexts, are migrated to the destination 	Select No to prevent contexts and segments still in development from being migrated with the remainder of the flexfield. If the context or segment exists in the destination, it will be removed from the flexfield definition.			
	 No. Flexfield contexts which are disabled in the source are not migrated to the destination. 	When using No for disabled contexts and disabled segments, make sure that the transaction data relating to the flexfield in the destination			
Disabled Segments	Specifies whether to migrate disabled segments. Select one of the following: Yes. All segments from the source, including disabled segments, are migrated to the destination. No. Flexfield segments which are disabled in the source are not migrated to the destination.	remains valid. If the context or segment exists in the destination it is removed, even if it is enabled. If the intent is to disable use of the flexfield context or segment in the destination, it should be disabled in the source and migrated with Yes .			

Table B-4. Descriptive Flexfields Migrator parameters

Folders

Before Migrating Folders

If the following entities are referenced by the folders in the source database, they must also exist in the destination database prior to the migration:

Object Migrator Guide and Reference Appendix 2: Migration Rules and Parameters

- Owner (application user)
- Segment (form blockname)
- Responsibilities or users referenced by a default folder setting

Folders Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Folders program.

Table B-5. Folders Migrator parameters

Parameter Name	Description
Specific	Type the name of the folders to migrate.
Folder Name	If left blank, the Folders Migrator will not limit by folder name (just by specific owner and specific segment if they are specified).
Specific	Type the owner of the folders to migrate.
Owner	The list of values for this parameter is not validated against the specific folder parameter. It is only validated against the application users defined in the source database.
	If left blank, the Folders Migrator will not limit by folder owner (just by specific folder name and specific segment if they are specified).
New Owner Name	Optionally, type a new owner name.
Specific	Type the folder segment of the folders to migrate.
Segment Name	The list of values for this parameter is not validated against the specific folder or the specific owner parameter. It is only validated against all the folder segments in the source database.
	If left blank, the Folders Migrator will not limit by folder segment (just by specific folder name and specific owner if they are specified).

FSG Row/Column Sets

The FSG row/column sets migrator is for Oracle E-Business Suite Release 11 only.

Before Migrating FSG Row/Column Sets

Before migrating FSG row/column sets, make sure that if the following entities are referenced by the Row Set or Column Set in the source database, they also exist in the destination database prior to the migration:

- Flexfield structures
- Standard axes
- Set of books

FSG Row/Column Sets Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate FSG Row/Col Sets request.

Parameter Name	Description
Set Type (required)	Type the type of FSG Sets to migrate:Column to migrate FSG Column SetsRow to migrate FSG Row Sets
Specific Row/Column Set	Type the name of the FSG Row Set or FSG Column Set to migrate. Query this value from the Define Row Set or Define Column Set forms.
	The list of values for this parameter does not limit the values by Set Type.
	For a description of this common parameter, see "Table B-1. Object Migrator common parameters" on page 83.

Table B-6. FSG Row/Column Sets Migrator parameters

Functions

These are objects that define functions for Oracle E-Business Suite Release 11 and later.

Before Migrating Functions

If the following entities are referenced by the function in the source database, they must also exist in the destination database prior to the migration.

- Form applications
- Objects referenced by a function must exist on the destination database. This applies only when the destination instances are Oracle E-Business Suite 11.5.5 or later, as object functionality was added in Oracle E-Business Suite 11.5.5.
- Region applications referenced by a function must exist on the destination database if the destination is Oracle E-Business Suite 11.5.5 or later.
- Region codes referenced by a function must exist on the destination database if the destination is Oracle E-Business Suite 11.5.5 or later.
- The context dependence value, maintenance mode support value, and type value referenced by a function must exist on the destination database if the destination includes this information. This is validated by the migrate Functions Migrator.

When migrating from instances that do not include maintenance mode support, the maintenance mode support value will default to **None**.

When migrating from instances that do not include the **Context Dependence** field, the context dependence value will default to responsibility.

If a form referenced by a function does not exist on the destination database, it will be created. The form file will not be copied to the destination.

Note: In some patch levels of Oracle E-Business Suite Release 11i, user function names do not need to be unique. The Functions Migrator enforces the appropriate logic based on the rules in place in the destination.

Functions Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Functions program.

Parameter Name	Description
Specific Function	Type the name of the function to migrate. Query this uppercase- only value from the Define Form Functions form (using the Smart Client application).
	For a description of this common parameter, see "Table B-1. Object Migrator common parameters" on page 83.
New User Function Name	Type the new user name of the function as it will appear in the destination database after the migration. This gives you the ability to change the user name for a function. If left blank, Object Migrator uses the user name from the source database.

GUI Menus

Before Migrating GUI Menus

If the following entities are referenced by the GUI menus in the source database, they must also exist in the destination database prior to the migration.

- Functions referenced by the menu (and the menu tree underneath the menu, if Single Level Only is set to No)
- If Single Level Only is set to Yes, then any child menus reference by the parent menu must exist in the destination database.
- Menu types referenced by the menu must exist in the destination database. This applies only when menu types are in use in the destination.
- Security Groups

If the destination database is Oracle E-Business Suite Release 11.5.5 or later, the Object Migrator will submit the Compile Security program in the destination instance in order to complete the menu compilations introduced in Oracle E-Business Suite 11.5.5.

Note: When migrating entire menu structures, make sure that standard menus are not overwritten. Standard menus may be referenced from submenus in a custom menu structure.

GUI Menus Migrator Parameters

Migrating a range of parent menus with Single Level set to No can entail migrating very large amounts of data. It is recommended to migrate parent menus in small batches or individually.

The following parameters are located on the Submit Request window for the Migrate GUI menus request.

Tabla	D O	~	Manua	Minustan	
rapie	D-O .	GUI	menus	wigrator	parameters

Parameter Name	Description
Specific Menu Name	Type the menu name of the menu to migrate. Query this uppercase-only value from the define menus form. For a description of this common parameter, see "Table B-1. Object Migrator common parameters" on page 83.
New Menu Title	Accept the default or type a new title for the menu after migration. If left blank, Object Migrator uses the title from the source database.
Single Level Only (required)	 Select one of the following: Yes. Only migrate the top level menu entries of the given menu. No. Migrate the entire menu and sub-tree below the specific menu name. When migrating entire menu structures, make sure that standard menus are not overwritten. Standard menus may be referenced from submenus in a custom menu structure.
Overwrite if Exists	For a description of this common parameter, see "Table B-1. Object Migrator common parameters" on page 83. Note that this parameter governs the parent menu only. If migrating an entire menu tree, submenus that exist will be overwritten without error, even if Overwrite is set to No, as long as the top parent menu did not exist.
Compare Only	For a description of this common parameter, see "Table B-1. Object Migrator common parameters" on page 83. For better output, it is recommended that comparisons of menus be run with Single Level Only set to Yes.

Messages

Before Migrating Messages

If the following entities are referenced by the messages in the source database, they must also exist in the destination database prior to the migration:

- Application
- Category, if the destination supports this information
- Severity, if the destination supports this information

For server-side messages only, Oracle E-Business Suite requires the execution of Generate Messages. Due to database limitations with distributed transactions, Object Migrator cannot launch this program remotely. As a post migration step for each unique language and application combination successfully migrated, this program needs to be run.

You can run the program by navigating to the Define Messages Character Mode form, querying a message from the given application, updating the record without a real change, and committing the transaction. For example, change a letter in the message and change it back.

This can also be done by launching the program from the command-line for the destination database. For more information, see the *Oracle E-Business Suite System Administration Guide*.

Messages Migrator Parameters

The following parameters are located on the Submit Request window for the

Migrate Messages request.

Table B-9	. Messages	Migrator	parameters
-----------	------------	----------	------------

Parameter Name	Description
Specific Message	Type the message name of the message to migrate. Query this uppercase-only value from the Define Messages form.

Printer Definitions

Use this migrator to migrate printer types and all the printers, printer styles, and printer drivers associated with them.

Any printers, printer styles, and printer drivers that are already assigned to the printer type in the destination database will not be removed, even if they do not exist in the source database.

Before Migrating Printer Definitions

If the following entities are referenced by the printer definitions in the source database, they must also exist in the destination database prior to the migration.

- Subroutines or commands
- Platforms

Any new printer styles must have a sequence number that is unique on the destination database.

Printer Definitions Migrator Parameters

The following parameters are located on the Submit Request window for the

Migrate Printer Definitions program.

Table B-10	. Printer	Definitions	Migrator	parameters
------------	-----------	-------------	----------	------------

Parameter Name	Description
Specific Printer Type	Type the name of the printer type to migrate. Object Migrator attempts to migrate the printer type, any printer attached to the printer type, any printer style assigned to the printer type, and any printer Driver assigned to the printer type. Query this uppercase-only value from the Define Printer Types form.
	For a description of this common parameter, see "Table B-1. Object Migrator common parameters" on page 83.

Parameter Name	Description
Import Printers	 Yes. Along with the printer type itself, migrate any printers attached to the printer type. No. Migrate the printer styles and Drivers, but not any printers attached to the printer type.

Profile Options

Caution should be used when migrating profile option values to make sure that the values remain valid in the destination. When migrating profile option values, values are not re-derived or validated during migration. This could cause problems if the value is not valid or refers to a different entity in the destination database. For example, the organization id for an inventory org.

Before Migrating Profile Options

If the following entities are referenced by the profile options in the source database, they must also exist in the destination database prior to the migration:

- Users that have a user-level setting for the profile option
- Responsibilities that have a responsibility-level setting for the profile option
- Applications that have a application-level setting for the profile option
- If migrating with Values Only set to **Yes**, the profile option to which the values belong must exist in the destination
- Hierarchy type
- Organizations that have an organization-level setting for the profile option (for organization hierarchy)
- Servers that have a server-level setting for the profile option (for server hierarchies)

Additionally, the following migration rules should be noted:

• Any SQL statements used in profile options being migrated should be valid in the destination database.

This is not validated by the Migrate Profile Options program.

• When moving profile settings, the Profile Options Migrator does not validate the actual option value. For example, if a profile option was for a user and in the source database the value was a user ID corresponding to SYSADMIN, the migrator would bring the user id over to the destination as is. It would not get the user ID of SYSADMIN in the destination database and would not validate that the user id is

valid in the destination.

- When migrating from a release where hierarchy types are not used to an instance that uses hierarchy types, the profile is created using the security hierarchy.
- Object Migrator allows migration of values for profiles using the server hierarchy. Migrating profile option values at the server level may produce Missing Reference errors unless the same servers are shared across Oracle E-Business Suite instances, because their server names would differ.

The migrator raises the oracle.apps.fnd.profile.value.update Business Event in the destination for each profile where values have been migrated to or removed from the destination. This occurs only if the destination supports the functionality (11.5.9 or later) and Migrate Profile Option Values is set to Yes.

The following are special considerations relevant to Business Events:

- Raising Business Events can cause real-time processing to occur in the destination, and the migration will not finish until this processing completes. Minimizing real-time processing in subscriptions for the oracle.apps.fnd.profile.value.update event helps make sure efficiency of profile option value migrations.
- You should be sure that custom processing code for subscriptions to the oracle.apps.fnd.profile.value.update event functions correctly when invoked across a database link.
- If Business Event processing encounters an error, it is logged in the destination instance and does not prevent completion of the migration. You should monitor the errors in the destination instance to identify any issues.

Profile Options Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Profile Options program.

Parameter Name (*Required)	Description
Specific Profile Option	Type the name of the profile option to migrate. Query this uppercase only value from the Define Profile Options form.

Parameter Name (*Required)	Description
New Profile User Name	Accept the default value or type a new value for the profile user name. If left blank, Object Migrator uses the user name from the source database.
Migrate Profile Option Values *	 Options are: Yes. Along with the profile option itself, migrate all the section of the profile from the section of the profile from the section.
	the settings on the destination database for the same sites, applications, responsibilities, servers, organizations, and users.
	• No . Do not migrate any settings for the profile option from the source database. Do not modify the settings on the destination database.
Migrate Values Only *	Options are:
	• Yes . Do not migrate the profile option definition. But migrate the profile option settings (at the site, application, responsibility, server, organization, and user levels).
	• No . Do not exclude the profile option definition in the migration.
Remove Non- Migrated Values *	Options are:
	• Yes . If migrating profile option values, remove any settings that exist in the destination and not the source database.
	 No. Do not remove profile option settings that exist in the destination but not the source.

Table B-11. Profile Options Migrator parameters, continued

QuickCodes (AOL)

QuickCode objects, based on the FND_COMMON_LOOKUPS table, can be viewed or modified using the Define QuickCode form under the application developer responsibility.

Before Migrating QuickCode

Quick Codes can not be migrated to or from Release 11i to any other release.

QuickCodes Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate QuickCodes request.

Only the object-specific parameters are defined here. For more information on the common Object Migrator parameters, see "Table B-1. Object Migrator common parameters" on page 83.

Table B-12. QuickCodes Migrator parameters

Parameter Name	Description
Specific QuickCode Type	Type the name of the QuickCode type to migrate. Query this value from the Define QuickCodes form.

Request Groups (Report Groups)

In some releases of Oracle E-Business Suite, request groups are referred to as report groups.

Before Migrating Request Groups

If the following entities are referenced by the request groups in the source database, they must also exist in the destination database prior to the migration.

- Concurrent programs
- Request sets
- Applications

If assigned, the request group code referenced by the request group in the source database must be unique within the application in the destination database.

Request Groups Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Report Groups program.
Table B-13. Request Groups Migrator parameters

Parameter Name	Description
Specific Report Group	Type the name of the request group which to migrate. This value can be queried from the Request Sets form (Define Report Groups in some releases). This is not the code associated to the request group.

Request Sets (Report Sets)

Before Migrating Request Sets

If the following entities are referenced by the request sets in the source database, they must also exist in the destination database prior to the migration.

- Concurrent programs
- Concurrent programs parameters (when the request set defines a default value)
- Request set stage function

Request Sets Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Report Sets program.

Table B-14. Request Sets Migrator parameters

Parameter Name	Description
Specific Report Set	Type the name of the request set to migrate. Query this value from the Request Sets form (named Define Report Sets in some releases).
New Report Set Code	When migrating to an Oracle E-Business Suite Release 11, 11i, or 12 instance, use this parameter to change the code of the request set as it is migrated. Oracle requires that the request set code is unique in a given instance. If you are using the migrator to create a copy of an existing request set, use this parameter to change the code for the new request set being created.

Responsibilities

Before Migrating Responsibilities

If the following entities are referenced by the responsibilities in the source database, they must also exist in the destination database prior to the migration.

- Data groups and their applications
- Menus
- Request groups
- Security groups
- Inventory orgs (applies only if both source and destination are multi-org enabled)
- Functions
- Functions or menus referenced by the responsibility as exclusions

Responsibilities Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Responsibilities program.

Parameter Name	Description
Specific Responsibility	Type the name of the responsibility to migrate. Query this value from the Define Responsibilities form.
Migrate Enabled Resp Only (required)	 Options are: Yes. Migrate only enabled responsibilities. No. Migrate both enabled and disabled responsibilities.

Table B-15	Responsibilities	Migrator	narameters
	Responsibilities	ingrator	parameters

Parameter Name	Description
Synchronize Workflow Tables	Use this parameter only if the destination is an Oracle 11.5.9 instance. If the instance is not at the 11.5.9 level, this parameter will be ignored.
	Options are:
	 Yes. After the migration is complete, populate the workflow local tables automatically for all responsibilities being migrated.
	• No. Do not populate the workflow local tables. This option is recommended for mass migrations. In such cases, you can synchronize using the Synchronize WF Local Tables program, which will populate the workflow local tables for all responsibilities defined in the application.

Table B-15. Responsibilities Migrator parameters, continued

Parameter Name	Description
Migrate Sec Attrib Values	For some patch levels of Oracle E-Business Suite Release 11i, users can define values for securing attributes as part of the responsibility.
	We recommend using No , unless the:
	 Responsibility for versions in both the source and destination are 11.5.17 or later
	 Attribute values attached to the responsibilities will be valid in the destination
	The table where securing attribute values are stored, ak_ resp_security_attr_values, is currently delivered by Oracle without indexes defined. If you plan to define securing attributes values in responsibilities, even if you do not plan to migrate them, consider defining indexes on this table to improve migration performance.
	• No. Security attribute values are not migrated from the source to the destination. Existing securing attribute values in the destination remain in place, as long as the responsibility definition still includes the particular Securing Attribute.
	 Yes. Migrate all security attribute values for the responsibility. Existing values are removed and replaced.
	Securing attribute values are not validated or re- derived during migration and are often typed without any validation in the Responsibilities form. This could cause problems if the value is not valid (such as the organization ID for an inventory org) or refers to a different entity in the destination.
	Oracle implements the data structures for securing attributes before fully implementing the logic. Migrating securing attribute values from an instance where they are defined, to an instance where the table structures are in place but the logic is not, will define values that cannot be removed

Table B-15. Responsibilities Migrator parameters, continued

Users

Before Migrating Users

If the following entities are referenced by the users in the source database, they must also exist in the destination database prior to the migration.

- Employees referenced by any new users being migrated
- Responsibilities
- Customers and Suppliers referenced by any new users
- Security Groups
- Securing Attributes

User passwords should be reset at the destination instance for the user to be functional.

If customer information is associated with the user, the definition of that information between environments must be consistent. In the Oracle E-Business Suite 11i release, this definition changed and migrations from the newer definition to the old definition are not allowed.

Users Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Users program.

Parameter Name (*Required)	Description
Specific User Name	Type the name of the user which to migrate. Query this value from the Define Users form.
New User Name	When creating a new user, for security reasons, change the password of the new user after the migration is complete.

 Table B-16. Users Migrator parameters

Parameter Name (*Required)	Description
Create User *	Specifies whether to create a new user in the destination database. Options are:
	• Yes. If the user does not exist on the destination database, create the user based on the header information from the source database.
	• No . If the user does not exist on the destination database, set the status of the object to Error.
	If the user already exists, the Users Migrator will not update any of the user header information. It only updates the user responsibilities and securing attribute information. When creating a new user, for security reasons, change the password of the new user after the migration is complete.
Active Resp Only	Determines which responsibilities to migrate. Options are:
*	 Yes. Migrate only the user responsibilities that either do not have an end date or have an end date in the future. No. Migrate all user responsibilities.
Overwrite Resp End Date *	Specifies whether to overwrite responsibilities in the destination database. Options are:
	• Yes . If the user and the user responsibility already exists on the destination database and the user responsibility has an end date, overwrite the end date with the end date from the source database.
	• No . Do not overwrite the end date if the user responsibility exists on the destination database and has an end date.
Disable Non- Migrated Resp *	Specifies whether to disable responsibilities associated with the user in the destination database that were not migrated. Options are:
	• Yes . If the user responsibility exists on the destination database but not on the source database, then set the end date to the date.
	• No . Do not modify user responsibilities that exist on the destination database but not on the source database.

Parameter Name (*Required)	Description
Migrate Enabled Users Only *	Options are:
	• Yes. Only migrate enabled users.
	• No. Migrate both enabled and disabled users.

Parameter Name (*Required)	Description
Migrate Securing Attributes *	For some patch levels of Oracle E-Business Suite Release 11i, users can define values for securing attributes as part of the user definition.
	Securing attributes values associated with a user are typed without validation in Oracle E-Business Suite. The following securing attributes are actively managed, because their values are related to other values on the user header record:
	 ICX_HR_PERSON_ID (related to the Employee associated with the user)
	 TO_PERSON_ID (also related to the Employee)
	 ICX_CUSTOMER_CONTACT_ID (related to the Customer)
	 ICX_SUPPLIER_CONTACT_ID (related to the Supplier).
	These values are created when the user is created, and are maintained as the information on the user record changes. These values can be manually removed or amended using the Define Users form.
	Migration handles managed attribute values in the following ways regardless of the parameter value, if the user:
	• Already exists in the destination, the managed values from the destination are retained.
	 Does not already exist, the attributes are migrated to the destination and updated with the appropriate values from the user record.
	• Is being migrated from a release which does not manage the attributes, the attributes are automatically created and defaulted.
	Options are:
	• No . Migrate only attributes which Oracle E-Business Suite actively manages. Other attributes will neither be migrated from the source nor removed from the destination.
	• Yes . Migrate all securing attribute values for the user. Existing values will be removed or replaced.
	When migrating Securing Attributes, non-managed values are not re-derived or re-validated during migration. This could cause problems if the value (for example, the organization ID for an inventory org) is not valid or refers to a

Parameter Name (*Required)	Description
	different entity in the destination.
Synchronize Workflow Tables	Use this parameter only if the destination is an Oracle 11.5.9 instance. Otherwise it is ignored. Options are:
	 Yes. After the migration is complete, populate the workflow local tables automatically for all users being migrated.
	• No. Do not populate the workflow local tables. This option is recommended for mass migrations. In such cases, you can synchronize using the Synchronize WF Local Tables program, which will populate the workflow local tables for all users defined in the instance.

Value Sets

Before Migrating Value Sets

If the following entities are referenced by the value sets in the source database, they must also exist in the destination database prior to the migration.

- Parent value sets
- Validation types
- Security groups

SQL statements used in value sets being migrated should be valid in the destination database. This is not validated by the Migrate Value Sets program.

Value sets defined with hierarchical security can be migrated only to other instances that support hierarchical security. Otherwise, the migration errors for the value set.

When migrating value sets with hierarchical security, the Compile Value Set Hierarchies program is submitted in the destination to compile the migrated information. This applies only when the destination instance supports hierarchical security.

Make sure that the transaction data relating to the value set in the destination remains valid. The migration replaces the definition in the destination, which can remove existing value set values.

When defining Table-validated value sets, you can specify additional ID and meaning columns. For each column defined, you can specify a datatype and size value. As of Release 11.5.8, the inclusion of size and type information for any specified columns is required. The Object Migrator enforces that this information is specified when migrating to any Release 11i instance, because the resulting functional error occurs in all Release 11i instances.

Value Sets Migrator Parameters

The following parameters are located on the Submit Request window for the Migrate Value Sets request.

Table B-17. Value Sets Migrator parameters

Parameter Name	Description
Specific Value Set	Type the name of the value set which to migrate. Query this value from the Define Value Sets form.

Appendix 2: Exception Messages

The following is a list of Object Migrator exception messages that includes the following categories:

- Internal Error Messages. Require action and are generally caused by some system problem and should be passed directly to the system administrator for follow-up with Micro Focus.
- Error Messages. Require action and are generally caused by some form of invalid data and can often be resolved by the user.
- **Warning Messages**. Do not require action but often provide useful information or a reminder to the user.

Message: 1000	Error: Object already exists in version label
Cause	The Object being saved to the object archive already exists in the specified version label.
Action	Either save the Object to another version label or use the Purge Object Archive Versions Detail Report program to remove the object from the version label.
Message: 1100	Error: Concurrent program already exists
Cause	Specified new concurrent program name already exists in the destination environment.
Action	Run the Migrate Concurrent Programs program with Overwrite set to Yes .
Message: 1101	Error: Executable type does not exist in destination
Cause	The executable program referenced by the concurrent program is a type of executable not supported in the destination.
Action	Do not migrate this program to the destination until the destination supports the executable type.
Message: 1102	Error: Another concurrent program exists with the same user program name.
Cause	A different concurrent program name with the same user program name as the object being migrated exists in the

Action	Change the user program name of the object being migrated.
Message: 1103	Error: Concurrent request class does not exist on destination database.
Cause	Concurrent request class associated with object being migrated does not exist on destination database.
Action	Create request class in destination database.
Message: 1104	Error: Incompatible program does not exist on destination database.
Cause	The concurrent program in migration references an incompatible program name that does not exist in the destination database.
Action	Migrate incompatible concurrent program first or remove the reference to the incompatible program from the concurrent program in source database.
Message: 1105	Error: Value set does not exist on destination database.
Cause	The specified value set referenced by the object in migration must exist on the destination database prior to migration.
Action	Migrate all value sets reference by the concurrent program, prior to migrating the concurrent program.
Message: 1106	Error: Default profile option does not exist on destination database.
Cause	The specified default profile option referenced by the object in migration must exist on the destination database prior to migration.
Action	Setup default profile options referenced by the concurrent program, prior to migrating the concurrent program.
Message: 1200	Error: Report set already exists
Cause	Specified new report set name already exists in destination database
Action	Run Migrate Report Sets program with Overwrite set to Yes .

Message: 1201	Error: Concurrent program does not exist on destination database
Cause	The concurrent program referenced by the object in migration does not exist on the destination database.
Action	Migrate the referenced concurrent program prior to migrating the report set.
Message: 1202	Error: Concurrent program parameter does not exist on destination database.
Cause	One of the parameters used by the concurrent program referenced by the report set in migration does not exist on the destination database. Migrating a concurrent program with Partials Allowed set to Yes can allow a concurrent program to come over without some of its parameters.
Action	Migrate the referenced concurrent program prior to migrating the report set. Set Partials Allowed should be set to No .
Message: 1203	Error: Report Set program does not exist on destination database.
Cause	The report set header is tied to a concurrent program that does not exist in the destination database.
Action	Migrate the referenced concurrent program prior to migrating the report set.
Message: 1204	Error: Value set already exists.
Cause	Specified New value set name already exists in the destination database.
Action	Run the Migrate Value Sets program with Overwrite set to Yes .
Message: 1301	Error: Parent value set should co-migrate or exist in the destination.
Cause	In order to migrate a value set that has a parent value set, the parent value set must exist in the destination or be part of the same migration.
Action	Migrate the parent value set first, or at the same time as the current value set.

Message: 1303	Error: Value set with hierarchical security is not supported in the destination hence cannot be migrated.
Cause	The value set being migrated is set up to use hierarchical security, but the destination does not support hierarchical security configurations.
Action	Do not migrate this value set to the destination until the destination supports hierarchical security, or modify the value set to use a security configuration that is supported in the destination.
Message: 1401	Error: Table application does not exist in the destination.
Cause	The application short name which owns the table associated with the descriptive flexfield in migration must exist in the destination database prior to migrating the descriptive flexfield.
Action	Set up application short name in the destination database prior to migrating the descriptive flexfield.
Message: 1402	Error: Desc. Flex Table Does Not Exist or Registered under different App. in Dest.
Cause	The Table owning the descriptive flexfield in migration does not exist in the destination database or is not registered to the same application as in the source database.
Action	Register table under correct application in the destination database.
Message: 1403	Error: Desc. Flex Title is already used by an existing Flex in Destination.
Cause	The destination instance already has a different Descriptive Flex with the same title as the Descriptive Flex in migration. Different Descriptive Flex refers to a Descriptive Flex where the name is different then the new descriptive flex name of the object in migration.
Action	Either change the Title of the Different Descriptive Flex in the destination environment or change the Title of the Descriptive Flex in Source.

Message: 1404	Error: Column used for this Flex is already registered to a different Flex in dest instance.
Cause	A single column may only be registered to one descriptive flexfield. The descriptive flex in migration is registered to a column that is already registered to a different descriptive flex in the destination instance.
Action	Use a different column for either the flexfield which references it in either the source database or the destination database.
Message: 1405	Error: Value set Does Not Exist in the Dest instance.
Cause	The descriptive flexfield in migration references a value set that does not exist in the destination database.
Action	Migrate the referenced value set prior to migrating the descriptive flexfield.
Message: 1406	Error: Profile option used in Flex Does Not Exist or is disabled in Destination.
Cause	The descriptive flexfield in migration references a profile option that does not exist in the destination database.
Action	Set up the referenced profile option prior to migrating the descriptive flexfield.
Message: 1407	Error: Protected Flag in Destination environment is set to Yes .
Cause	The descriptive flexfield in migration has been secured against overwrites in the destination instance.
Action	Set the Protected Flag to No for that flexfield in the destination database prior to migration.
Message: 1411	Error: Column not registered in destination environment.
Cause	The column referenced by the descriptive flexfield is not registered in the destination.
Action	Register the column in the destination or remove it from the descriptive flexfield definition.
Message: 1500	Error: Report group already exists.

Cause		Specified new report group name already exists in destination database.	
Action		Run Migrate Report Groups program with Overwrite set to Yes .	
Message: 15	01	Error: Concurrent Program / Report does not exist on destination database.	
Cause		The concurrent program or report referenced by the object in migration does not exist in the destination database.	
Action		Migrate the referenced concurrent program or report prior to migrating the report group.	
Message: 1502	Erroi	Error: Report set does not exist on destination database.	
Cause	The on th	he report set referenced by the object in migration does not exist In the destination database.	
Action	Migr grou	ligrate the referenced report set prior to migrating the report roup.	
Message: 1503 Err		Error: Application does not exist on destination database.	
Cause		The application which owns the report set in migration does not exist on the destination database.	
Action		Set up application short name in the destination database prior to migrating the descriptive flexfield. Or migrate the object to a different destination application which does exist in the destination database	
Message: 17	00	Error: Parent menu already exists.	
Cause		Specific menu name already exists in the destination instance.	
Action		Run Migrate Menus program with Overwrite set to Yes .	
Message: 17	01	Error: Form does not exist on destination database.	
Cause		Form referenced by menu in migration does not exist in the destination instance or is registered under a different application.	

Action If the form does not exist then create it and register un the same application as the in the source database. If form exists, then it must be registered under the corre owning application.		If the form does not exist then create it and register under the same application as the in the source database. If the form exists, then it must be registered under the correct owning application.
Message: 17	02	Error: Child menu does not exist on destination database.
Cause		Menu in migration references a child menu which does not exist in the destination instance. This can happen under two conditions: 1) Single Level Only was set to Yes . The system will not attempt to migrate the child menu from the source instance under this condition, therefore the child menu must exist in the destination instance. 2) Import Standard Oracle Menus was set to No . The menu in migration references a child menu which is a standard Oracle menu which has been removed in the destination instance. The program considers a standard Oracle menu any menu which is owned by an Oracle Application.
Action		Three options: 1) Create the missing menu in the destination instance and rerun the migration s before. 2) Rerun the migration program with Single Level Only set to No . Use this option with caution. 3) Rerun the migration program with Import Standard Oracle Menus set to Yes . Use this option with caution.
Message: 17	03	Error: Subroutine does not exist on destination database.
Cause		The Subroutine referenced by the menu in migration does not exist in the destination instance.
Action		Create the Subroutine in the destination instance and rerun the migration.
Message: 1704	Error: Macro does not exist on destination database.	
Cause	The Macro referenced by the menu in migration does not exist in the destination instance.	
Action	Create the Macro in the destination instance and retry the migration.	
Message: 1705	Error: Referenced Form does not exist on destination database.	

Cause	The Form referenced by the menu in migration does not exist in the destination instance.		
Action	Creat migra	Create the Form in the destination instance and retry the migration.	
Message: 17	06	Error: Another menu exists with the same menu title.	
Cause		The name of the menu in migration already exists in the destination instance and Overwrite is set to No .	
Action		Run Migrate Menus program with Overwrite set to Yes.	
Message: 19	00	Error: Responsibility already exists.	
Cause		Specified new responsibility name already exists in destination database.	
Action		Run Migrate Responsibilities program with Overwrite set to Yes .	
Message: 19	01	Error: Data group does not exist in destination database.	
Cause		The data group referenced by the responsibility in migration does not exist in the destination database.	
Action		Set up the referenced data in the destination database.	
Message: 19	02	Error: Form does not exist in destination database.	
Cause		The first Form referenced by the responsibility in migration does not exist for the owning application in the destination instance.	
Action		Create the form in the destination instance if it does not already exist. Register the form to the owning application in the destination instance. Note: The form must have the same owning application in the source and destination instances.	
Message: 19	03	Error: Menu does not exist in destination database.	
Cause		The top menu referenced by the responsibility in migration does not exist in the destination database.	
Action		Create the top menu in the destination database.	

Message: 1904	Error: Report group does not exist in destination database.c
Cause	The report group referenced by the responsibility in migration does not exist in the destination instance.
Action	Create the report group in the destination database.
Message: 1905	Error: Data group application does not exist in destination database.
Cause	The data group application referenced by the responsibility does not exist in the destination database.
Action	Add the reference application to the data group in the destination database.
Message: 2000	Error: User does not exist on the destination database.
Cause	The Users Migrator is being run with Create User set to No and the user does not exist on the destination database.
Action	Run the migrator with Create User set to Yes or manually create the user on the destination database before rerunning the migration.
Message: 2001	Error: Employee does not exist on the destination database.
Cause	The employee referenced by the new user being migrated does not exist in the destination database.
Action	Type the employee on the destination database before rerunning the migration.
Message: 2002	Error: Responsibility does not exist on the destination database.
Cause	User references a responsibility that does not exist on the destination database.
Action	Create the responsibility on the destination database before rerunning the migration.
Message: 2100	Error: Profile option already exists.
Cause	Specified new profile option name already exists in destination database.

Action	Run Migrate Profile Options program with Overwrite set to Yes .
Message: 2101	Error: Another profile exists with the same user profile name.
Cause	User profile name must be unique within a database. The destination database has a different profile option defined with the same user name as the profile option in migration.
Action	Rename the user name of either the profile option being migrated, or the profile option with the same user name in the destination database.
Message: 2102	Error: Application does not exist in destination database.
Cause	The application referenced by the profile option value does not exist in the destination database.
Action	Set up the referenced application in the destination database.
Message: 2103	Error: Responsibility does not exist in destination database.
Cause	The responsibility referenced by the profile option value does not exist for the owning application in the destination instance.
Action	Create the responsibility in the destination instance.
Message: 2104	Error: User does not exist in destination database.
Cause	The user referenced by the profile option value does not exist in the destination database.
Action	Create the user in the destination database.
Message: 2105	Error: Invalid Profile Level.
Cause	The profile option value references a profile value not recognized by the Profile Options Migrator.
Action	Change the level to one of the following: site, application, responsibility, server (if supported), organization (if supported), or user.

Message: 2107	Error: Security profiles cannot be migrated to instances that do not support this hierarchy.
Cause	The destination does not support hierarchy types, but the profile being migrated requires support for the security hierarchy type.
Action	Do not migrate this profile option to this instance.
Message: 2108	Error: Organization profiles cannot be migrated to instances that do not support this hierarchy.
Cause	The destination does not support hierarchy types, but the profile being migrated requires support for the organization hierarchy type.
Action	Do not migrate this profile option to this instance.
Message: 2109	Error: Server does not exist on destination database. The server referenced by the profile option value does not exist in the destination database.
Cause	Object Migrator allows migration of values for profiles using the server hierarchy. Migrating profile option values at the server level may produce Missing Reference errors unless the same servers are shared across Oracle E-Business Suite instances, because their server names would differ.
Action	Define the server in the destination database prior to migrating profile option values or do not migrate values for this Profile.
Message: 2110	Error: Organization does not exist on destination database.
Cause	The organization (operating unit) referenced by the profile option value does not exist in the destination database.
Action	Define the organization in the destination database prior to migrating profile option values.
Message: 2111	Error: Another profile exists with the same profile name.
Cause	Profile option names must be unique within a database. The destination database has a profile option belonging to a different application that uses the same profile option name.

Action	If the information in the destination is correct for the profile option being migrated, resubmit the migration, setting Dest Application to the correct value. Otherwise, change the name of the profile being migrated.
Message: 2300	Error: QuickCode type already exists.
Cause	Specified new QuickCode type already exists in destination database.
Action	Run Migrate QuickCodes program with Overwrite set to Yes .
Message: 2301	Error: Customization level does not exist on destination database.
Cause	The customization level specified in the QuickCode type does not exist in the destination database.
Action	Contact support.
Message: 2302	Error: Using application does not exist on destination database.
Cause	The QuickCode type is being used by an application that does not exist in the destination database.
Action	Create the application in the destination database or run the Migrate QuickCodes program with Partials Allowed set to Yes .
Message: 2500	Error: Row/Col Set already exists.
Cause	Specified New Row/Col Set already exists in destination database.
Action	Run Migrate FSG Row/Column Set program with Overwrite set to Yes .
Message: 2501	Error: Flexfield structure does not exist on destination database.
Cause	Row/Col Set references a flexfield structure that does not exist in destination database.
Action	Create the flexfield structure in destination database and rerun the migrator program.

Message: 2502	Error: Standard Axes does not exist on destination database.
Cause	Row/Col Set references a Standard Axes that does not exist in destination database.
Action	Create the Axes in destination database and rerun the migrator program.
Message: 2600	Error: Printer type already exists on destination database.
Cause	Specified printer type already exists in destination database.
Action	Run Migrate Printer Definitions program with Overwrite set to Yes .
Message: 2601	Error: Printer already exists on destination database.
Cause	Specified printer already exists in destination database.
Action	Run Migrate Printer Definitions program with Overwrite set to Yes .
Message: 2602	Error: Printer Information already exists on destination database.
Cause	Specified printer information (assignment) already exists in destination database.
Action	Run Migrate Printer Definitions program with Overwrite set to Yes .
Message: 2603	Error: Printer style already exists on destination database.
Cause	Specified printer style already exists in destination database.
Action	Run Migrate Printer Definitions program with Overwrite set to Yes .
Message: 2604	Error: Printer Driver already exists on destination database.
Cause	Specified printer Driver already exists in destination database.
Action	Run Migrate Printer Definitions program with Overwrite set to Yes.

Message: 2605	Error: Another printer driver exists with the same user name.
Cause	User names must be unique across printer drivers. A driver with a different code already exists and has the same name as the driver being validated.
Action	Change the user name of the existing printer driver or the new driver.
Message: 2606	Error: Platform is not defined in destination database.
Cause	Printer Driver refers to a platform not defined on the destination database.
Action	Add the platform to the destination database using the Define Special QuickCodes form.
Message: 2607	Error: Printer Subroutine does not exist on destination database.
Cause	Row/Col Set references a Set of Books that does not exist in destination database.
Action	Create the Set of Books in destination database and rerun the migrator program.
Message: 2608	Error: Another printer style exists with the same user name.
Cause	User names must be unique across printer styles. A style with a different code already exists and has the same name as the style being validated.
Action	Change the user name of the existing printer style or the new style.
Message: 2609	Error: Another printer style exists with the same sequence.
Cause	Sequences must be unique across printer styles. A style with a different code already exists and has the same sequence as the style being validated.
Action	Change the sequence of the existing printer style or the new style.

Message: 2700	Error: Folder already exists on destination database.
Cause	Specified Folder already exists in destination database.
Action	Run Migrate Folders program with Overwrite set to Yes .
Message: 2701	Error: Responsibility does not exist on destination database.
Cause	Folder references a responsibility that does not exist in destination database.
Action	Create the responsibility in destination database and rerun the migrator program.
Message: 2702	Error: User does not exist on destination database.
Cause	Folder references a user that does not exist in destination database.
Action	Create the user in destination database and rerun the migrator program.
Message: 2703	Error: Owner does not exist on destination database.
Cause	Folder is owned by an applications user that does not exist in destination database.
Action	Create the user in destination database and rerun the migrator program.
Message: 2704	Error: Another folder exists with the same owner and segment.
Cause	Another folder exists on the destination database with the same owner and the same referenced segment.
Action	Delete the other folder and rerun the migrator program.
Message: 2800	Error: Parent menu already exists on destination database.
Cause	Menu already exists in destination database.
Action	Run Migrate GUI Menus program with Overwrite set to Yes .
Message: 2801	Error: Menu does not exist on destination database.

Cause	Parent menu references a menu that does not exist in destination database.
Action	Create the menu in destination database and rerun the migrator program or run the migrator program with Single Level set to No .
Message: 2802	Error: Function does not exist on destination database.
Cause	Menu references a form function that does not exist in destination database.
Action	Create the function in destination database and rerun the migrator program.
Message: 2803	Error: Child menu does not exist on destination database.
Cause	Parent menu references a menu that does not exist in destination database.
Action	Create the menu in destination database and rerun the migrator program or run the migrator program with Single Level set to No .
Message: 2804	Error: Another menu exists with the same menu title.
Message: 2804 Cause	Error: Another menu exists with the same menu title. Menu title must be unique across menus. A menu with a different name exists that has the same menu title.
Message: 2804 Cause Action	Error: Another menu exists with the same menu title. Menu title must be unique across menus. A menu with a different name exists that has the same menu title. Change the menu title of the existing menu or the menu being validated.
Message: 2804 Cause Action Message: 2805	 Error: Another menu exists with the same menu title. Menu title must be unique across menus. A menu with a different name exists that has the same menu title. Change the menu title of the existing menu or the menu being validated. Error: Menu type does not exist in the destination database where menu type can be: Home Page, Data Security, Standard, HTML Tab, or Unknown.
Message: 2804 Cause Action Message: 2805 Cause	 Error: Another menu exists with the same menu title. Menu title must be unique across menus. A menu with a different name exists that has the same menu title. Change the menu title of the existing menu or the menu being validated. Error: Menu type does not exist in the destination database where menu type can be: Home Page, Data Security, Standard, HTML Tab, or Unknown. The given type menu is not defined in the destination database.
Message: 2804 Cause Action Message: 2805 Cause Action	 Error: Another menu exists with the same menu title. Menu title must be unique across menus. A menu with a different name exists that has the same menu title. Change the menu title of the existing menu or the menu being validated. Error: Menu type does not exist in the destination database where menu type can be: Home Page, Data Security, Standard, HTML Tab, or Unknown. The given type menu is not defined in the destination database. You are probably migrating the menu from a earlier version of Oracle E-Business Suite to a later version. Make sure the particular type is available in the destination database.
Message: 2804 Cause Action Message: 2805 Cause Action Message: 2900	 Error: Another menu exists with the same menu title. Menu title must be unique across menus. A menu with a different name exists that has the same menu title. Change the menu title of the existing menu or the menu being validated. Error: Menu type does not exist in the destination database where menu type can be: Home Page, Data Security, Standard, HTML Tab, or Unknown. The given type menu is not defined in the destination database. You are probably migrating the menu from a earlier version of Oracle E-Business Suite to a later version. Make sure the particular type is available in the destination database. Error: Function already exists on destination database.

Action	Run Migrate Functions program with Overwrite set to Yes .
Message: 2901	Error: Form application does not exist on destination database.
Cause	Function references a form that references an application that does not exist in destination database.
Action	Create the application in destination database and rerun the migrator program.
Message: 2902	Error: Form does not exist on destination database.
Cause	Function references a form that does not exist in destination database and there is not enough information to create the form.
Action	Create the form in destination database and rerun the migrator program.
Message: 2903	Error: Another function exists with the same user name.
Cause	User name must be unique across functions. A function with a different name exists that has the same user name.
Action	Change the user name of the existing function or the function being validated.
Message: 2904	Error: Object does not exist at the destination.
Cause	Function references an object that does not exist in the destination. The object could be any one of RESOURCES, ORGANIZATION, PROJECTS, TASKS, Contract, Program, and so forth.
Action	Create all the missing objects referenced by the function at the destination.
Message: 2905	Error: Region application does not exist at the destination.
Cause	Function references a region and the region does not exist or is with a different application at the destination.
Action	Create all the regions referenced by the function under the same application as in source.

Message: 2906	Error: Region code with application does not exist at the destination.
Cause	Function references a region through region code that does not exist at the destination.
Action	Create all the regions with correct region code referenced by the function at the destination. AKLOAD utility may be used for migrating region details from source to the destination.
Message: 2907	Error: Maintenance Mode Support value <value> is not valid in the destination.</value>
Cause	The destination requires Maintenance Mode Support information on functions, but does not support the Maintenance Mode Support value specified on the function in the source instance.
Action	Change the Maintenance Mode Support value so that it is supported in the destination, or get the destination to the same patch level before migrating the function.
Message: 2908	Error: Context dependence value <value> is not valid in the destination.</value>
Cause	The destination requires context dependence information on functions, but does not support the context dependence support value specified on the function in the source instance.
Action	Change the context dependence value so that it is supported in the destination, or get the destination to the same patch level before migrating the function.
Message: 2909	Error: Type value <value> is not valid in the destination.</value>
Cause	The destination validates type information on functions, but does not support the type value specified on the function in the source instance.
Action	Change the type value so that it is supported in the destination, or get the destination to the same patch level before migrating the function. Validate that the value is valid in the source.
Message: 3000	Error: Message already exists on destination database.

Cause	Specified Message already exists in destination database.
Action	Run Migrate Messages program with Overwrite set to Yes .
Message: 3001	Error: Application does not exist on destination database.
Cause	Message is for an application that does not exist in destination database.
Action	Create the application in destination database and rerun the migrator program.
Message: 3002	Error: Language code does not exist on destination database.
Cause	Message references a language code that does not exist in destination database.
Action	Type the appropriate language code in FND_LANGUAGES in destination database and rerun the migrator program.
Message: 3003	Error: Message category does not exist in the destination lookup.
Cause	Message being migrated has a category that is missing in the destination instance.
Action	Update the message category in the source, and then try migrating again.
Message: 3004	Error: Message severity does not exist in the destination lookup.
Cause	Message being migrated has a severity that is missing in the destination instance.
Action	Update the message severity in the source, and then try migrating again.
Message: 3100	Error: Concurrent Manager already exists on destination database.
Cause	Specified Concurrent Manager already exists in destination database.
Action	Run Migrate Concurrent Manager Definitions program with Overwrite set to Yes .

Message: 3101	Error: Workshift already exists on destination database.
Cause	Specified work shift already exists in destination database.
Action	Run Migrate Concurrent Manager Definitions program with Overwrite set to Yes.
Message: 3102	Error: Combined Specialization Rule already exists on destination database.
Cause	Specified Specialization Rule already exists in destination database.
Action	Run Migrate Concurrent Manager Definitions program with Overwrite set to Yes .
Message: 3103	Error: Program library does not exist on destination database.
Cause	Concurrent Manager references a program library that does not exist in destination database.
Action	If a custom program Concurrent Manager executable was created, then install it in the destination database. If the missing library is a standard library, then contact Oracle Support to see why it is missing from the destination database.
Message: 3104	Error: Concurrent Manager is active in the destination database.
Cause	The Concurrent Manager Definitions Migrator will not migrate an existing Concurrent Manager Definition if the manager is currently active in the destination database.
Action	Deactivate the Concurrent Manager on the destination database or make sure it does not have a current work shift.
Message: 3105	Error: Combined Rule / Oracle Id / Concurrent Program / Request Type / User does not exist on the destination database.
Cause	A specialization rule references an AOL object that does not exist on the destination database.

Action	Create the appropriate AOL object in the destination database or run the Migrate Concurrent Manager Definitions program with Partials Allowed set to Yes (in which case the specialization rule will not get migrated).
Message: 4100	Warning: Printer does not exist on destination database.
Action	Create printer on destination database and assign it to appropriate concurrent program.
Message: 4101	Warning: Printer style does not exist on destination database.
Action	Create printer style on destination database and assign it to appropriate concurrent program.
Message: 7100	Internal Error: Error getting CONCURRENT_PROGRAM_ID.
Action	Contact support.
Message: 7101	Internal Error: Error getting EXECUTABLE_ID.
Action	Contact support.
Message: 7200	Internal Error: Error getting REQUEST_SET_ID.
Action	Contact support.
Message: 7201	Internal Error: Error getting REQUEST_SET_PROGRAM_ID.
Action	Contact support.
Message: 7207	Error: Another Request Set has the same translation for the User Request Set Name at the Destination.
Action	Check the data.
Message: 7208	Error: Another Request Set has the same translation for the User Request Set Name at the Destination.
Action	Check the data.
Message: 7300	Internal Error: Error getting FLEX_SET_VALUE_ID.
Action	Contact support.
Message: 7301	Internal Error: Error getting FLEX_VALUE_ID.

Action	Contact support.
Message: 7311	Error: Null value found for type or size of ID column in the value set definition.
Cause	Table-validated value set being migrated has an ID column specified, but the related type or size information is missing.
Action	Update the value set in the source instance by adding the related type or size information for the ID column, and then try migrating again.
Message: 7312	Error: Null value found for type or size of meaning column in the value set definition.
Cause	Table-validated value set being migrated has a meaning column specified, but the related type or size information is missing.
Action	Update the value set in the source instance by adding the related type or size information for the meaning column, and then try migrating again.
Message: 7313	Error: Flexfield Structure for the new value does not exist in destination.
Cause	When copying value set with value attributes, if the new value set name does not exist in DFF Flexfield Segment Values an error is generated. User must add an entry into the DFF Flexfield Segment Values for the new value set before copying a value set with value attributes into a new value set.
Message: 7400	Internal Error: Error getting APPLICATION_ID.
Action	Contact support.
Message: 7406	Error: Context override value set does not exist at the destination or the destination database does not have support for context override value set.

Cause	This error happens under one of the following circumstances:
	• The descriptive flexfield references a value set for context override value set that does not exist at the destination.
	 The descriptive flexfield being migrated has context override value set properties set and the destination version of Oracle E-Business Suite is earlier than 11.5.5, which does not support context override value set features.
Action	Create the value set referenced by the descriptive flexfield at the destination.
Message: 7500	Internal Error: Error getting REQUEST_GROUP_ID.
Action	Contact support.
Message: 7700	Internal Error: Error getting MENU_ID.
Action	Contact support.
Message: 7801	Internal Error: Unable to get ACTION_SEQUENCE _ID in destination database.
Action	Contact support.
Message: 7900	Internal Error: Unable to get RESPONSIBILITY _ID in destination database.
Action	Contact support.
Message: 8000	Internal Error: Unable to get USER_ID in destination database.
Action	Contact support.
Message: 8100	Internal Error: Unable to get PROFILE_OPTION_ID in destination database.
Action	Contact support.
Message: 8200	Internal Error: Unable to get PROFILE_OPTION_ID in destination database.
Action	Contact support.
Message: 8300	Internal Error: Error getting APPLICATION_ID.

Action	Contact support.
Message: 8400	Internal Error: Error getting APPLICATION_ID.
Action	Contact support.
Message: 8500	Internal Error: Error getting AXIS_SET_ID.
Action	Contact support.
Message: 8502	Internal Error: Error getting APPLICATION_ID.
Action	Contact support.
Message: 8502	Internal Error: Error getting EXCEPTION_ID.
Action	Contact support.
Message: 8600	Internal Error: Error getting PRINTER_TYPE.
Action	Contact support.
Message: 8700	Internal Error: Error getting FOLDER_ID.
Action	Contact support.
Message: 8800	Internal Error: Error getting MENU_ID.
Action	Contact support.
Message: 8801	Internal Error: Error getting MENU_ID for child menu.
Action	Contact support.
Message: 8900	Internal Error: Error getting FUNCTION_ID.
Action	Contact support.
Message: 9100	Internal Error: Error getting CONCURRENT_QUEUE_ID.
Action	Contact support.
Message: 9101	Internal Error: Error getting CONCURRENT_TIME_PERIOD_ID.
Action	Contact support.

Object Migrator Guide and Reference Appendix 2: Exception Messages

Message: 9102	Internal Error: Error getting COMPLEX_RULE_ID.
Action	Contact support.
Message: 9103	Internal Error: Error getting COMPLEX_RULE_LINE_ID.
Action	Contact support.

Object Migrator Guide and Reference Appendix 2: Exception Messages
Send Us Feedback



Let us know how we can improve your experience with the Object Migrator Guide and Reference. Send your email to: docteam@microfocus.com