Informatica

# Informatica® PowerExchange for Oracle E-Business Suite

10.1.1

# User Guide for PowerCenter

Informatica PowerExchange for Oracle E-Business Suite User Guide for PowerCenter
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# Preface

The *Informatica PowerExchange® for Oracle E-Business Suite User Guide for PowerCenter®* provides information about extracting data from an Oracle E-Business Suite source and loading data into an Oracle E-Business Suite target. The *User Guide* is written for database administrators and developers who are responsible for extracting data from Oracle E-Business Suite and loading data to Oracle E-Business Suite. This book assumes you have knowledge of an Oracle E-Business Suite and PowerCenter.

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CHAPTER 1

# Understanding PowerExchange for Oracle E-Business Suite

This chapter includes the following topics:



## PowerExchange for Oracle E-Business Suite Overview

PowerExchange for Oracle E-Business Suite integrates PowerCenter with Oracle E-Business Suite to extract data from Oracle E-Business Suite applications and write data to Oracle E-Business Suite applications. Oracle E-Business Suite sources represent tables, views, or flexfields in an Oracle application. Oracle E-Business targets represent open interface tables.

Oracle E-Business Suite consists of business applications to help manage components of an enterprise. Oracle E-Business Suite includes applications for supply chain management, human resource management, and financials.

You can use PowerExchange for Oracle E-Business Suite to read data from Oracle E-Business Suite in the following situations:

- Synchronize data with other applications. Sometimes, to enable smoother flow of operations, data generated or captured in an E-Business suite application must be synchronized with other applications in the IT environment. For example, to provide better post sales support, it would help to synchronize data in an E-Business suite application with data in a custom application built for performing post sales operation. PowerExchange for Oracle E-Business Suite enables you to read data from the E-Business suite application, which can then be written to the custom application.
- Collect data for analysis and reporting. For example, your organization wants to include data from the Oracle E-Business Suite financial application to report on quarterly profits. Use PowerExchange for Oracle E-Business Suite to read data from the financial application and write it to the data warehouse for the reporting tool.

You can use PowerExchange for Oracle E-Business Suite to write data to Oracle E-Business Suite in the following situation:

- Migrate data to Oracle E-Business Suite. For example, your organization uses an ERP system for human resource management. You want to migrate to Oracle E-Business Suite human resource management applications. Leverage the connectivity provided by PowerCenter to extract data from legacy systems and use PowerExchange for Oracle E-Business Suite to write data to the Oracle E-Business Suite human resource management application.

# PowerCenter Integration with Oracle E-Business Suite

PowerExchange for Oracle E-Business Suite integrates Oracle E-Business Suite with the Designer and the PowerCenter Integration Service. Import Oracle E-Business Suite metadata into PowerCenter and use it in mappings. You can run sessions that extract, transform, and load Oracle E-Business Suite data.

## Designer and Oracle E-Business Suite Integration

PowerExchange for Oracle E-Business Suite connects the Designer to the database tier of Oracle E-Business Suite using ODBC drivers. You can import tables, views, and flexfields from the Oracle database tier as source definitions.

You can import open interface tables as target definitions. When you import a target definition, the Designer connects to the database tier.

## PowerCenter Integration Service and Oracle E-Business Suite Integration

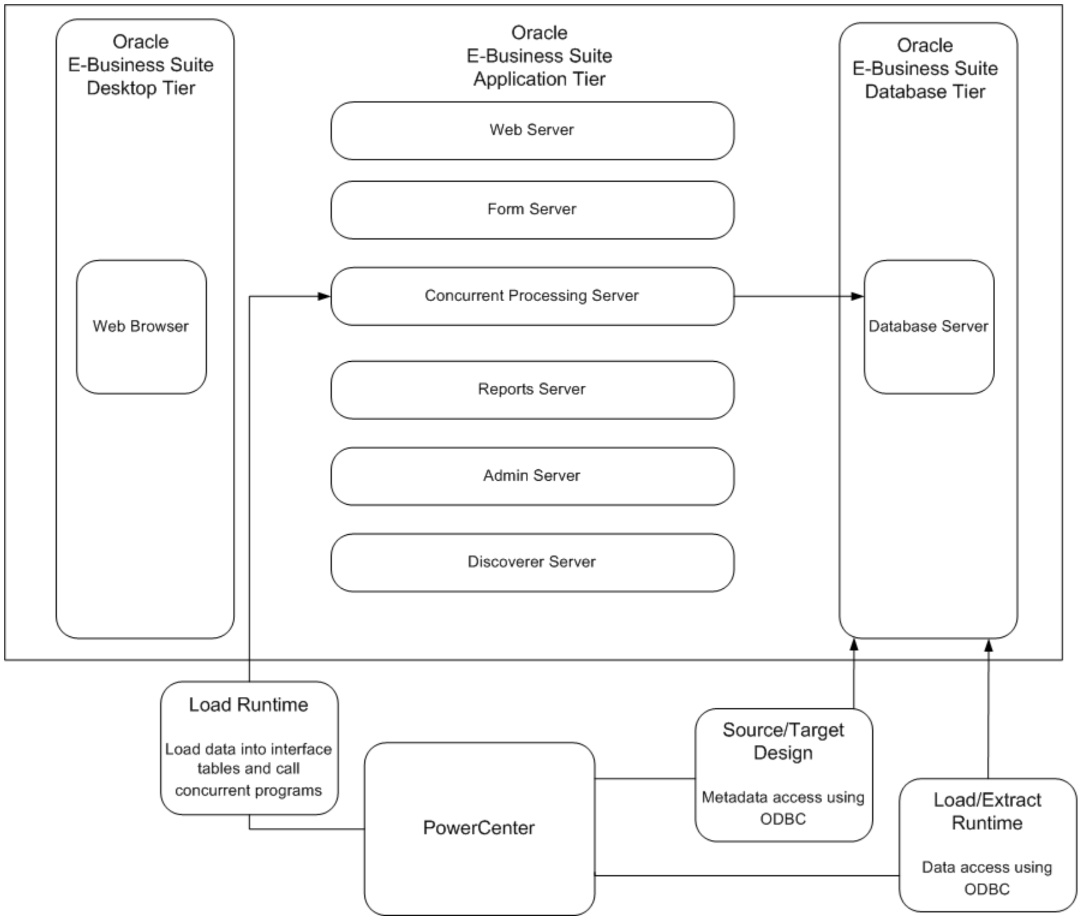
The PowerCenter Integration Service uses ODBC to connect to the Oracle E-Business Suite. It connects to the database tier of Oracle E-Business Suite to read source data and write target data.

The PowerCenter Integration Service writes target data to open interface tables. The PowerCenter Integration Service submits a request to the concurrent manager, which manages batch processing and report generation. The concurrent manager calls a concurrent program. The concurrent program processes the data, validates it, and writes the data into the Oracle E-Business Suite application tables.

Some open interfaces process data in batches. For example, the General Ledger Journal Entry Open Interface imports journal entry batches. To process data in batches, the open interface submits one request for each batch of data to the concurrent program.

Open interfaces use a batch identifier to process data in batches. The batch identifier is a unique value assigned to each row of data. Open interfaces that require a batch identifier contain a batch identifier column in the open interface table. A batch identifier can be in several forms, such as Batch_ID, Batch_name, and Group ID. For example, General Ledger Journal Entry uses the column JE_BATCH_ID. The form of the batch identifier in the open interface is the form of the batch identifier in the target definition.

The following figure shows the PowerCenter Integration Service and Oracle E-Business Suite Integration:




### Related Topics:

- "Oracle E-Business Suite Target Mappings" on page 34

# Understanding Oracle E-Business Suite

Oracle E-Business Suite addresses business-to-business (B2B) and business-to-consumer (B2C) sales, marketing, analysis, and service needs through the Internet. Oracle E-Business Suite consists of front-office Customer Relationship Management (CRM) applications and back-office Enterprise Resource Planning (ERP) applications. These applications automate marketing, sales, contracts, service, manufacturing, and supply chain processes. They also automate financial operations, project management, human resource operations, and business intelligence systems.

Oracle E-Business Suite has a three-tier architecture. It includes the desktop tier, application tier, and database tier.

A tier is a logical grouping of services that can be spread across more than one physical machine. The desktop tier provides the user interface through an add-on component to a standard Web browser. The application tier supports and manages various application components. It hosts servers that process the business logic. It also manages communication between the desktop tier and the database tier. The database tier supports and manages the Oracle database.

PowerExchange for Oracle E-Business Suite interacts with the database tier to extract metadata and data. When the PowerExchange for Oracle E-Business Suite loads data to Oracle E-Business Suite, it interacts with the database tier and the Concurrent Processing Server component of the application tier.

PowerExchange for Oracle E-Business Suite submits a request to the Oracle E-Business Suite concurrent manager to run a concurrent program, which initiates the data loading from the open interface tables to the Oracle E-Business Suite tables. A concurrent program validates the data before loading it to the internal tables. Each open interface has an associated concurrent program.

# Oracle E-Business Suite Integration Objects

Oracle E-Business Suite integration objects refer to the objects that you can import as source or target definitions.

## Tables and Views

Oracle E-Business Suite maintains its ERP data in tables and views created in the underlying database. Along with business data, the tables and views store the data required for Oracle E-Business Suite applications to function. For example, tables and views store user information, object information, and the data about relationships between tables and the application. You can get metadata by querying the metadata tables that are managed by the Application Object Library.

## Flexfields

Oracle E-Business Suite stores its master data in codes. Codes consist of segments that identify general ledger accounts, part numbers, and other business entities. Each segment can represent a characteristic of the entity. Oracle E-Business Suite applications represents these codes in the form of flexfields.

## Open Interfaces

Oracle E-Business Suite provides open interfaces to write data to applications. Each open interface contains multiple interface tables. An interface table is a set of Oracle tables designed specifically to load data. PowerExchange for Oracle E-Business Suite can load these interface tables and call the related concurrent program to load the data into Oracle E-Business application tables.

# CHAPTER 2

# Installation and Configuration

This chapter includes the following topics:



## Installation and Configuration Overview

This chapter provides information about upgrading, installing, and configuring PowerExchange for Oracle E-Business Suite.

### Prerequisites

Before you upgrade or install PowerExchange for Oracle E-Business Suite, complete the following tasks:

- Install or upgrade PowerCenter. For more information about the PowerCenter versions that PowerExchange for Oracle E-Business Suite is compatible with, see the PowerExchange for Oracle E-Business Suite Release Notes.
- Verify that you have read and write permissions on the following directories on each machine that runs the PowerCenter Integration Service or PowerCenter Repository Service:

  ```
  <PowerCenter Installation Directory>\server\bin
  <PowerCenter Installation Directory>\server\bin\Plugin
  ```

  The installer must be able to add and overwrite files in these directories.
- Verify that you have read and write permissions on the following directories of each PowerCenter Client machine:

  ```
  <PowerCenter Installation Directory>\clients\PowerCenterClient\client\bin
  <PowerCenter Installation Directory>\clients\PowerCenterClient\client\bin\Help
  \<language>
  ```

  The installer must be able to add and overwrite files in these directories.
- Verify that you can access the machine hosting Oracle E-Business Suite from the machines on which the PowerCenter Services are running.
- Get the Select permissions to import metadata from Oracle E-Business Suite tables.

## Installing and Configuring PowerExchange for Oracle E-Business Suite

1. Install PowerExchange for Oracle E-Business Suite.
2. Register the plug-in.
3. Establish ODBC connectivity.

After you install and configure PowerExchange for Oracle E-Business Suite, you can create connections to access Oracle E-Business Suite. Create connection objects in the Workflow Manager so the PowerCenter Integration Service can connect to Oracle E-Business Suite.

## Before You Upgrade

Before you upgrade PowerExchange for Oracle E-Business Suite, uninstall the previous version. When you uninstall PowerExchange for Oracle E-Business Suite, you do not need to unregister the plug-in.

## Upgrading PowerExchange for Oracle E-Business Suite

When you upgrade PowerExchange for Oracle E-Business Suite, complete the following tasks:

1. Install PowerExchange for Oracle E-Business Suite.
2. Upgrade the plug-in registration.

# Installing PowerExchange for Oracle E-Business Suite

When you install PowerExchange for Oracle E-Business Suite, you install the following components that allow PowerCenter to access the Oracle E-Business Suite:

- Client component. Allows you to import definitions, create mappings, and create connection objects using the PowerCenter Client.
- Server component. Allows the PowerCenter Repository Service to store and access the Oracle E-Business Suite metadata in the repository and the PowerCenter Integration Service to run Oracle E-Business Suite sessions.

## Installing the Client Component

Install the Client component on each PowerCenter Client machine where you want to create or access Oracle E-Business Suite metadata.

1. Run install.bat from the installation package.
2. Click **Next**.
3. Select the Informatica installation directory.

   By default, the client is installed in the following location:

   ```
   C:\Informatica\<version folder>
   ```
4. Click **Next**.
5. Click **Install** to begin the installation.

6. Click **Done** when the installation is complete.

The client component is installed.

## Register Microsoft Hierarchical FlexGrid ActiveX Control Manually

After you install the client component, you must register the Microsoft Hierarchical FlexGrid control (mshflxgd.ocx) manually. PowerExchange for Oracle E-Business client component uses Microsoft Windows Hierarchical FlexGrid control to display the field information from Oracle E-Business database objects.

After you install the client, the mshflxgd.ocx file is saved at the following location on the client machine:

```
C:\Informatica\<version folder>\clients\PowerCenterClient\client\bin
```

Use the following syntax to register the Microsoft Hierarchical FlexGrid control with Microsoft Windows:

```
Regsvr32 [/u] [/s] <mshflxgd.ocx>
```

## Installing the Server Component

The PowerExchange for Oracle E-Business Suite server component installs the PowerCenter Integration Service and PowerCenter Repository Service components.

If the PowerCenter Integration Service or PowerCenter Repository Service is configured to run on primary and backup nodes, install the PowerExchange for Oracle E-Business Suite server component on each node configured to run the PowerCenter Integration Service or PowerCenter Repository Service.

If the PowerCenter Integration Service is configured to run on a grid, install the PowerExchange for Oracle E-Business Suite server component on each node configured to run on the grid. If you cannot install the PowerExchange for Oracle E-Business Suite server component on each node in the grid, create a resource in the domain and assign it to each node where you installed the PowerExchange for Oracle E-Business Suite server component. When you create a session, configure the session to use the resource.

For example, create a custom resource called Oracle E-Business Suite. When you create a session, assign the resource as a required resource. The Load Balancer dispatches the Session task to a node that has the resource.

### Installing the Server Component on Windows

Install the PowerExchange for Oracle E-Business Suite server component on Windows when the PowerCenter Integration Service or PowerCenter Repository Service runs on Windows.

1. Run install.bat from the installation package.
2. Click **Next**.
3. Select the Informatica installation directory.

   By default, the server components are installed in the following location:

   ```
   C:\Informatica installation directory\<version folder>
   ```
4. Click **Next**.
5. Click **Install** to begin the installation.
6. Click **Done** when the installation is complete.

The PowerCenter Integration Service and PowerCenter Repository Service components are installed.

## Installing the Server Component on UNIX

Install the PowerExchange for Oracle E-Business Suite server component on UNIX when the PowerCenter Integration Service or PowerCenter Repository Service runs on UNIX.

To install the PowerExchange for Oracle E-Business Suite server component on the UNIX platforms that support graphical user interface, perform the same steps that you use to install the server components on Windows.

To install the PowerExchange for Oracle E-Business Suite server component on the UNIX platforms that use the command line interface, perform the following steps:

1. Enter sh install.sh at the prompt.
2. Enter the path to the Informatica installation directory.

   By default, the server components are installed in the following location:

   ```
   <User Home Directory>/Informatica/<version folder>
   ```

The PowerCenter Integration Service and PowerCenter Repository Service components are installed.

# Registering the Plug-in

After you complete the installation, register the plug-in with the repository. If you are upgrading from a previous version, update the plug-in registration when you register the plug-in.

To register the plug-in, the repository must be running in exclusive mode. Use the Administrator tool or the pmrep RegisterPlugin command line program to register the plug-in. If you do not have the correct privileges to register the plug-in, contact the user who manages the PowerCenter Repository Service.

The plug-in file is an .xml file that defines the functionality of the adapter. When you install the server component, the installer copies the plug-in file to the following directory: `<PowerCenter installation directory>/server/bin/plugin`

The name of the plug-in file for PowerExchange for Oracle E-Business Suite is `EBusinessSuiteConnector.xml`.

## Registering the Plug-in from the Administrator Tool

Register a repository plug-in to add its functionality to the repository.

1. Run the PowerCenter Repository Service in exclusive mode.
2. In the **Navigator**, select the PowerCenter Repository Service to which you want to add the plug-in.
3. In the **Contents** panel, click the **Plug-ins** view.
4. In the **Actions** menu of the **Domain** tab, select **Register Plug-in**.
5. On the **Register Plugin** page, click the **Browse** button to locate the plug-in file.
6. Enter your user name, password, and security domain.

   The **Security Domain** field appears when the Informatica Domain contains an LDAP security domain.
7. Click **OK**.

   The PowerCenter Repository Service registers the plug-in with the repository. The results of the registration operation appear in the activity log.
8. Run the PowerCenter Repository Service in normal mode.

## Registering the Plug-in from the Command Line Interface

You can use the pmrep RegisterPlugin command to register the plug-in from the command line interface.

1. Run the PowerCenter Repository Service in exclusive mode.
2. Run the `pmrep Connect` command to connect to the Repository Service using a user account with Administrator Repository privilege.

   The RegisterPlugin command uses the following syntax:

   ```
   pmrep connect -r <repository name> -d <domain_name> -n <domain user name> -x
   <domain_password>
   ```
3. Find `<adaptername>.xml` in the following directory:

   `$INFA_HOME\server\bin\Plugin`
4. Run the `pmrep RegisterPlugin` command to update the repository.

   The `RegisterPlugin` command uses the following syntax:

   ```
   pmrep registerplugin -i <$INFA_HOME\server\bin\Plugin\<adaptername>.xml -e
   ```

# Establishing ODBC Connectivity

PowerCenter uses ODBC to connect to Oracle E-Business Suite to import definitions and to read and write Oracle E-Business Suite data. You specify an ODBC data source in the Designer when you import an Oracle E-Business Suite definition. You specify an ODBC data source in the Workflow Manager when you create an Oracle E-Business Suite application connection object.

## Establishing ODBC Connectivity on Windows

To establish ODBC connectivity for the PowerCenter Client and PowerCenter Integration Service on Windows, create an ODBC data source on each PowerCenter Client machine that you want to access Oracle E-Business Suite metadata. Also create an ODBC data source on each node on which the PowerCenter Integration Service is configured to run.

## Establishing ODBC Connectivity on UNIX

To establish ODBC connectivity for the PowerCenter Integration Service on UNIX, complete the following steps on which the PowerCenter Integration Service is configured to run:

1. Create an ODBC data source.
2. Set the library path.

For more information about creating an ODBC data source and setting the library path, see the PowerCenter installation guide.

# Uninstalling PowerExchange for Oracle E-Business Suite

To uninstall PowerExchange for Oracle E-Business Suite, delete all PowerExchange for Oracle E-Business Suite files from each machine where you installed the PowerExchange for Oracle E-Business Suite components.

CHAPTER 3

# Oracle E-Business Suite Sources and Targets

This chapter includes the following topics:



## Oracle E-Business Suite Sources and Targets Overview

Oracle E-Business Suite source and target definitions represent metadata for Oracle E-Business Suite sources and targets. You use the Import from Oracle E-Business Suite Wizard to import Oracle E-Business Suite source and target definitions. You can filter the metadata you want to display during import. After you create definitions, you can update the definitions.

When the PowerCenter Integration Service reads data from an Oracle E-Business Suite source, it converts the data based on the datatypes in the Application Source Qualifier transformation associated with the source.

### Importing Definitions for Multiple Objects

When you import a source or target definition and select more than one object, each object is imported as a separate source or target definition. If you import a target definition and select more than one table in the same interface, the Designer groups the objects and imports them as one target definition.

## Editing Oracle E-Business Suite Source and Target Definitions

Edit source and target definitions to record properties that you cannot import from the source or target. You can edit an Oracle E-Business Suite source definition to create key columns and key relationships. You need to edit an Oracle E-Business Suite target definition to define target properties.

### Related Topics:

- “Editing an Oracle E-Business Suite Target Definition” on page 26

# Filtering Source and Target Metadata

When you import an Oracle E-Business Suite source or target definition, you can filter the metadata you want to display in the wizard. You can select a filter type and then enter a name or description to filter source or target metadata. To enter a filter condition, use an SQL expression or regular expression syntax.

The following table describes common regular expression syntax metacharacters that you can use in a filter:

| Metacharacter | Definition |
| --- | --- |
| . | Matches any single character. |
| [ ] | Indicates a character class. Matches any character inside the brackets. For example, [abc] matches “a,” “b,” and “c.” |
| ^ | If this metacharacter occurs at the start of a character class, it negates the character class. A negated character class matches any character except those inside the brackets. For example, [^abc] matches all characters except “a,” “b,” and “c.”<br>If ^ is at the beginning of the regular expression, it matches the beginning of the input. For example, ^[abc] will only match input that begins with “a,” “b,” or “c.” If the metacharacter occurs anywhere except in the beginning in a character class, it is invalid. |
| - | In a character class, indicates a range of characters. You can match a single character from this range of characters. For example, [0-9] matches any of the digits “0” through “9.” |
| ? | Indicates that the preceding expression to this metacharacter is optional. It matches the preceding expression zero or one times. For example, [0-9][0-9]? matches “2” and “12.” |
| + | Indicates that the preceding expression matches one or more times. For example, [0-9]+ matches “1,” “13,” “666,” and similar combinations. |
| * | Indicates that the preceding expression matches zero or more times. |
| ??, +?, *? | Non-greedy versions of ?, +, and *. These match as little as possible, unlike the greedy versions which match as much as possible. For example, given the input “<abc><def>,” <.*?> matches “<abc>” while <.*> matches “<abc><def>.” |
| () | Grouping operator. For example, (\d+,)*\d+ matches a list of numbers separated by commas such as “1” or “1,23,456.” |
| { } | Indicates a match group. |

| Metacharacter | Definition |
| --- | --- |
| \ | Escape character: interpret the next character literally. For example, [0-9]+ matches one or more digits, but [0-9]\+ matches a digit followed by a plus character. Also used for abbreviations (such as \a for any alphanumeric character; see the following table).<br>**Note:** that in C++ string literals, two backslashes must be used: “\\+,” “\\a,” “<{.*?}>.*?</\\0>.” |
| $ | At the end of a regular expression, this character matches the end of the input. For example, [0-9]$ matches a digit at the end of the input. |
| \| | Alternation operator: separates two expressions, exactly one of which matches. For example, T\|the matches “The” or “the.” |
| ! | Negation operator: the expression following ! does not match the input. For example, a!b matches “a” not followed by “b.” |

For example, if you enter the filter F01.*1 for a table, the wizard displays all the tables that begin with F01 and end in 1.

The following characters are invalid in a regular expression:

# / , < = > @ ; : % _ \

The following table describes the abbreviations that you can use in regular expressions:

| Abbreviation | Definition |
| --- | --- |
| \a | Any alphanumeric character: ([a-zA-Z0-9]). |
| \b | White space (blank): ([ \\t]). |
| \c | Any alphabetic character: ([a-zA-Z]). |
| \d | Any decimal digit: ([0-9]). |
| \h | Any hexadecimal digit: ([0-9a-fA-F]). |
| \n | Newline: (\r\|(\r?\n)). |
| \q | Quoted string: (\”[^\”]*\”)\|(\’[^\’]*\’). |
| \w | Simple word: ([a-zA-Z]+. |
| \z | Integer: ([0-9]+. |

# Filtering Source Metadata

Before you import a source definition, you can enter a filter to display the following types of metadata that meet the filter condition:

- Table
- View
- Flexfield
- Field

- Key

When you filter based on a key, the wizard displays all the objects with a primary key and foreign key relationship for a given table. Enter the complete table name in the Name field.

## Filtering Target Metadata

Before you import a target definition, enter a filter to display the following types of metadata that meet the filter condition:

- Open interface. Displays a list of open interfaces that meet the criteria specified in the name field. The description field is disabled for the open interface filter type.
- Open interface table. Displays a list of all the open interface tables if any of the tables from that open interface meets the criteria specified in the name or description field.

# Working with Oracle E-Business Suite Sources

Use the Import from Oracle E-Business Suite Wizard to import an Oracle E-Business Suite source definition. You can import the following types of Oracle E-Business Suite metadata as an Oracle E-Business Suite source definition:

- Tables
- Views
- Flexfields

When you connect to Oracle E-Business Suite, the wizard lists each application. Each application contains tables, views, and flexfields. These are child objects of the application.

You can select tables, views, or flexfields to import. When you import a source definition with a flexfield, the Designer adds a field called CONCATENATED_PORT. This field concatenates all other fields separated by the delimiter defined in Oracle E-Business Suite.

When you select a child object, the name, description, datatype, precision, and scale display on the Field List tab. If you select an application, the Field List tab remains blank.

## Previewing Source Data

When you import a source definition, you can preview the source data. Select a table, view, or flexfield in the wizard, and click Preview Data.

By default, the wizard displays 100 rows of the data on one screen. You can change the number of rows to be displayed. Maximum is 500. Minimum is 1. You can also filter the metadata you want to display using the filter type.

## Defining a Schema Name

After you import an Oracle E-Business Suite source, you can define a schema name for the source. When you create an Oracle E-Business Suite source definition, the Designer includes a schema name for the source. You can also change the schema name. The session fails if you enter an invalid schema name. To define a schema name, enter the name in the Schema Name field on the Metadata Extensions tab. You can refer to the Oracle database for the valid schema names.

# Working with Oracle E-Business Suite Targets

You can import open interface tables as an Oracle E-Business Suite target definition. When you connect to Oracle E-Business Suite, the Import from Oracle E-Business Suite Wizard lists each application. Each application contains the open interface you can import. To display custom open interfaces, edit the InterfaceList.xml located in the <PowerCenter Installation Directory>\clients\PowerCenterClient\client\bin\ directory.

## Custom Open Interfaces

You can import the custom open interface table as an Oracle E-Business Suite target definition. Before you import a custom open interface table, add the custom open interface to the InterfaceList.xml file.

InterfaceList.xml contains the open interfaces provided with Oracle E-Business Suite. The PowerExchange for Oracle E-Business Suite installer adds InterfaceList.xml to the <PowerCenter Installation Directory>\clients \powerCenterClient\client\bin directory.

The following table describes the elements required to add the custom open interface to InterfaceList.xml:

| Element | Description |
| --- | --- |
| APPLICATION | Oracle E-Business Suite application that the open interface belongs to. An application can contain more than one open interface. The APPLICATION element contains APPLICATION_SHORT_NAME to represent the application name. |
| INTERFACE | Open interface in the application. The interface name appears in the list of open interfaces when you import an Oracle E-Business Suite target definition. INTERFACE contains the INTERNALNAME element, which is the name of the concurrent request. |
| TABLE | Interface tables in the open interface. TABLE contains the NAME element, which is the name of an interface table. |

When you import a custom open interface to create a target definition, the Designer validates the open interface against ebizinterface.dtd. When you install PowerExchange for Oracle E-Business Suite, the installer adds ebizinterface.dtd to the <PowerCenter Installation Directory>\clients\PowerCenterClient\client\bin directory.

The following example shows the syntax for adding the AR TelecomInvoice custom open interface to InterfaceList.xml:

```
<APPLICATION NAME="AR">
<INTERFACE NAME="AR TelecomInvoice" INTERNALNAME="RATEL">
<TABLE NAME="AR_INTERFACE_LINES_ALL" />
<TABLE NAME="AR_INTERFACE_DISTRIBUTIONS_ALL" />
<TABLE NAME="AR_INTERFACE_SALESCREDITS_ALL" />
</INTERFACE>
</APPLICATION>
```

In this example, the open interface TI TelecomInvoice belongs to the Receivable application in Oracle E-Business Suite. The Receivable application is represented by the application name AR. The internal name of the open interface, RATEL, is the name of the concurrent request for the open interface. TI TelecomInvoice contains three tables defined under the TABLE element.

After you add the custom open interface to InterfaceList.xml, you can import the open interface as an Oracle E-Business Suite target definition.

## Defining a Schema Name

You can define one or more schema names for an Oracle E-Business Suite target. When you create an Oracle E-Business Suite target definition, the Designer includes a list of schemas for the target. It provides values for each interface table in the schema list.

## Defining Target Parameters

After you import an Oracle E-Business Suite target definition, configure open interface target parameters.

# Creating an Oracle E-Business Suite Source Definition

You import an Oracle E-Business Suite source definition from Oracle E-Business Suite. When you connect to Oracle E-Business Suite, the Import from Oracle E-Business Suite Wizard lists source objects.

1. In the Source Analyzer, click Sources > Import from Oracle E-Business Suite.
2. Select the DSN used to connect to the source system.

   To create or modify a DSN, click the Browse button to open the ODBC Administrator. Create the DSN, and click OK. Select the new DSN.
3. Enter a user name and password.

   **Note:** The user name must have the appropriate database permissions to view the object.
4. Enter the apps schema name that contains metadata for the Oracle E-Business Suite source.
5. Click Connect.
6. Optionally, select a language.

   By default, the wizard selects the base language of Oracle E-Business Suite.
7. Click Next.

   A list of applications appears.
8. Optionally, enter a filter condition to reduce the metadata that displays in the wizard.
9. Select one or more tables, views, or flexfields to import.

   If you select an object that contains child objects, all the child objects are selected. Clear the objects you do not want to import.
10. Optionally, select Show Selected Objects Only to display the selected objects.
11. Optionally, click an object to display a list of fields for the selected object on the Field List tab.

    The field list displays information about the object.
12. Optionally, click the Data Preview tab and select a source object to preview data. Click Preview data to preview data.
13. Click Next.
14. Click Import to import the definition.

    The Import Status window displays the status of the imported objects.

# Creating an Oracle E-Business Suite Target Definition

When you connect to Oracle E-Business Suite, the Import from Oracle E-Business Suite Wizard lists target objects.

1. Click Targets > Import from Oracle E-Business Suite in the Target Designer.
2. Select a DSN used to connect to the source system.

   To create or modify a DSN, click the Browse button to open the ODBC Administrator. Create the DSN, and click OK. Select the new DSN.
3. Enter a user name and password.

   **Note:** The user name must have the appropriate permissions to view the object.
4. Enter the apps schema name that contains metadata for the Oracle E-Business Suite target.
5. Click Connect.
6. Optionally, select a language.

   By default, the wizard selects the base language of Oracle E-Business Suite.
7. Click Next.

   A list of applications appears.
8. Optionally, enter a filter condition to reduce the amount of metadata that displays in the wizard.
9. Select one or more open interfaces or open interface tables.

   If you select an object that contains child objects, all the child objects are selected. Clear the objects you do not want to import.
10. Optionally, select Show Selected Objects Only to display the selected objects.
11. Click Next.
12. Click Import to import the definition.

    The Import Status window displays the status of the imported objects.

# Updating Oracle E-Business Suite Source Definitions

Manually edit the definition if you need to configure properties that you cannot import or if you want to make minor changes to the definition

You can update an Oracle E-Business Suite source definition to create key columns and key relationships. These relationships can be logical relationships. They do not have to exist in the database.

**Note:** If the changes are significant, you can reimport the definition. This overwrites or renames the existing source definition. You can retain existing primary key-foreign key relationships and descriptions in the source definition being replaced.

## Reimporting an Oracle E-Business Suite Source Definition

Complete the steps to reimport an Oracle E-Business Suite source definition. You can retain the following information in the definition being replaced:

- Primary key-foreign key relationships
- Source definition description

- Column or port description

## Editing an Oracle E-Business Suite Source Definition

Optionally, you can edit the table and column settings for an Oracle E-Business Suite source definition. You can edit the Schema Name on the Metadata Extensions tab.

# Updating Oracle E-Business Suite Target Definitions

Manually edit the definition if you need to configure properties that you cannot import or if you want to make minor changes to the definition.

You can update an Oracle E-Business Suite target definition to define target properties.

**Note:** If the changes are significant, you can reimport the definition. This overwrites or renames the existing target definition. You can retain existing primary key-foreign key relationships and descriptions in the target definition being replaced.

## Reimporting an Oracle E-Business Suite Target Definition

Complete the steps to reimport an Oracle E-Business Suite target definition. You can retain the following information in the definition being replaced:

- Primary key-foreign key relationships
- Target definition description
- Column or port description

## Editing an Oracle E-Business Suite Target Definition

On the Target Parameters tab, you can define the target properties for an Oracle E-Business Suite target definition. Oracle E-Business Suite uses the parameter values to initialize an Oracle application when running the concurrent manager.

The following table describes the properties you can edit on the Target Parameters tab:

| Target Properties | Description |
| --- | --- |
| Language | Language for the target properties. |
| User Name | User name to initialize the Oracle application. |
| Responsibility Name | Responsibility of the user name provided. |
| Security Group Name | Security group name to initialize the Oracle application. |

| Target Properties | Description |
|---|---|
| Server Name | Application server name to initialize the Oracle application. |
| Schema Name | Open interface schema list. When you edit the schema name, you can use the following options:<br>- Blank: If you leave the schema name blank, the PowerCenter Integration Service uses the default schema of the user with which you have connected to the Oracle E-Business Suite.<br>- Single value: If you enter a single value, the PowerCenter Integration Service uses the same value for all the interface tables.<br>- Comma-separated list: If you enter a comma-separated list, the PowerCenter Integration Service uses the comma-separated values for the interface tables. Verify that the number of values in the comma-separated list equals the number of interface tables.<br>If you enter an invalid schema, the session fails. |

# Key Relationships for Oracle E-Business Suite Targets

An open interface can contain multiple interface tables. These interface tables can have a primary key-foreign key relationship between them.

When you import an Oracle E-Business Suite target definition, the Designer creates a key relationship between each group in the target definition and its parent group. Each key uses the following naming convention:

```
GPK__<group_name>
GFK__<primary_group_name>__<group_name>
```

The following table describes the key naming conventions:

| Key Name Component | Description |
|---|---|
| GPK\|GFK | Type of key. GPK represents a primary key. GFK represents a foreign key. |
| group_name | Name of the group to which the key belongs. |
| primary_group_name | Name of the master group with which you have established primary key relationship. |

**Note:** When you create mappings with the primary key-foreign key relationship, the Designer might not create the relationship for the tables. You need to manually set the primary key relationship in the foreign key table.

The PowerCenter Integration Service uses these keys to maintain the hierarchy of the Oracle E-Business Suite data. It does not load the input data to the interface tables. A foreign key field that does not match the primary key of its parent group results in an orphan row. A primary key field that is not unique results in a duplicate row.

If you insert null values in the primary key or foreign key fields, the PowerCenter Integration Service does not write any hierarchy to the Oracle E-Business Suite target.

If you do not select the Skip Hierarchy Validation session property, you must link the GPK and GFK ports in the mapping.

**Note:** If you select the Skip Hierarchy Validation session property, the PowerCenter Integration Service ignores the data received on the GPK__<parent group> and GFK__<primary_group_name>__<group_name> ports of an Oracle E-Business Suite target.

## Primary Keys

When you import a target definition with a primary key, link the primary key in the source definition to the primary key and GPK column in the target definition. Link the foreign key in the source definition to the foreign key and GFK column in the target definition.

For example, your organization outsources its claim operations. Each claim is associated with the claim detail that contains transaction details, such as product details, price, and, unit of measurement. A claim can have multiple claim lines if it is tied to multiple offers.

Because claims are associated with multiple claim lines, the weekly claim information involves two data sources. One data source contains information about all the claims, such as customer name and claim amount. The other data source contains claim line information for each claim, such as product details.

For this business case, Oracle E-Business Suite provides the Import Claims Interface to import the claims. The Import Claims Interface has the following interface tables:

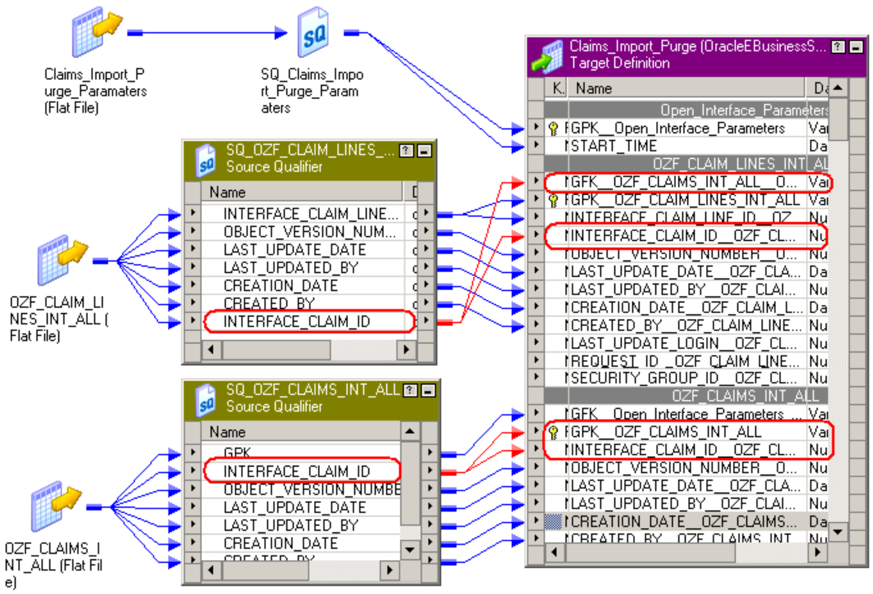
- OZF_CLAIMS_INT_ALL. This table contains information about the claims.
- OZF_CLAIM_LINES_INT_ALL. This table contains the details of each claim.

To identify the details of each claim, a primary key-foreign key relationship exists for both data sources. For example, you can use CLAIM_ID as the primary key for claim and CLAIM_LINE_ID as the primary key for claim lines.

You load claims from your CRM system to Oracle E-Business Suite. To map the primary key-foreign key relation to an open interface, the Designer defines a primary key column in the Open Interface Parameter group of the E-Business Suite target definition. The Designer also defines primary and foreign key columns in other groups of the target definition. These columns define the relationship between different data sources.

The other two groups in the target definition are the data groups that correspond to the interface tables.

The following figure shows an example of a GPK-GFK relationship:




In this example, sources provide input to the open interface. Each source definition corresponds to a group in the target definition. One source definition provides input data to the Open Interface Parameter group. The other two source definitions provide input data to the data groups.

The INTERFACE_CLAIM_ID column is the primary key in the OZF_CLAIM_LINES_INT_ALL source definition. It is linked to the INTERFACE_CLAIM_ID column and to the GFK_OZF_CLAIM_LINES_INT_ALL column of the OZF_CLAIM_LINES_INT_ALL group. The INTERFACE_CLAIM_ID column is the primary key of the OZF_CLAIMS_INT_ALL source definition. It is linked to the INTERFACE_CLAIM_ID column and to the GPK_OZF_CLAIM_LINES_INT_ALL column of the OZF_CLAIMS_INT_ALL group.

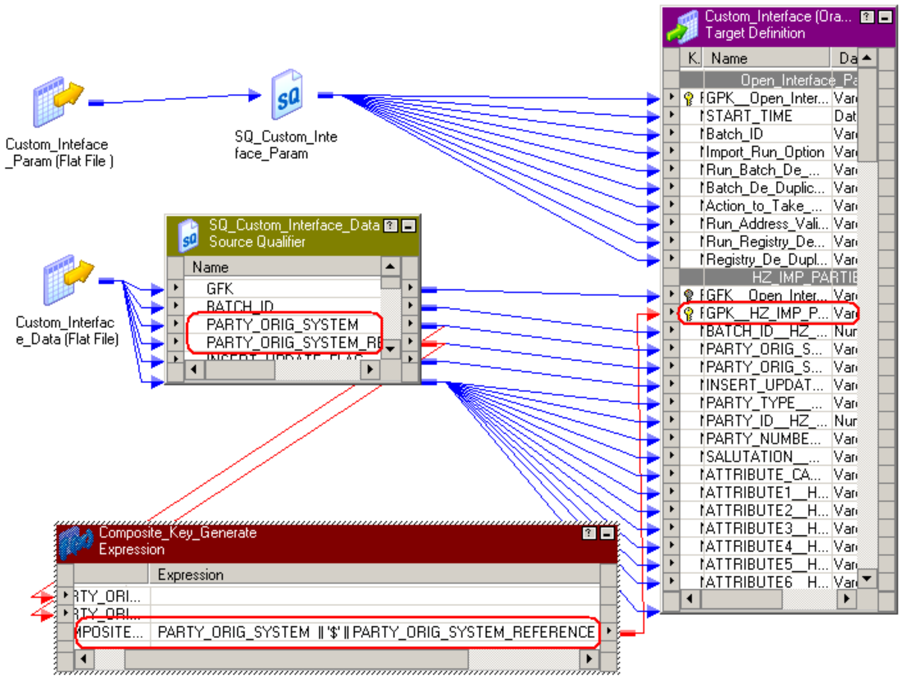
### Related Topics:

- "Passing Values to the Open Interface Parameter Group " on page 34

## Composite Keys

When you import a target definition with a composite key, you need to build a unique key from the source composite key using the appropriate transformations. You need to connect this unique key to the GPK of the corresponding group of target definition.

The following figure shows an example of a mapping that uses an Expression transformation to create a unique key from the composite key:




In this example, the PARTY_ORIG_SYSTEM column and the PARTY_ORIG_SYSTEM_REFERENCE column build a composite key. An Expression transformation generates a unique key. This unique key is linked to primary key of the target definition.

CHAPTER 4

# Application Source Qualifier Transformation

This chapter includes the following topics:



## Application Source Qualifier Transformation Overview

The Application Source Qualifier transformation is an active transformation that represents the rows that the PowerCenter Integration Service reads when it runs the session. By default, the Designer creates an Application Source Qualifier when you add an Oracle E-Business Suite source to a mapping. If you configure the Designer to create a source definition without a source qualifier, you can create the Application Source Qualifier manually. You must then manually connect the source qualifier to a source definition in the mapping.

## Application Source Qualifier Transformation Components

An Application Source Qualifier transformation contains the following tabs:

- Transformation. Enter the name and description of the transformation. The naming convention for a Application Source Qualifier transformation is *ASQ_TransformationName*.
- Ports. Create and configure ports.
- Properties. View the properties on the Properties tab. Configure the tracing level property for the Application Source Qualifier transformation.
- Sources. View and edit the source definitions associated with the Application Source Qualifier transformation.

- Metadata Extensions. Create a non-reusable metadata extension to extend the metadata of the Application Source Qualifier transformation. Configure the extension name, datatype, precision, and value.
- SQL Properties. Defines SQL properties for the transformation.

# Configuring SQL Properties

Configure SQL properties on the SQL Properties tab.

## Select Distinct

Selects unique source rows. The PowerCenter Integration Service uses SELECT DISTINCT in the default query.

## Source Filter

Configure the filter conditions applied by the PowerCenter Integration Service when querying source rows. When you enter a filter condition, the Designer adds the filter to the default query. Use the following syntax for the source filter:

```
<TABLE_NAME><.><FIELD_BUSINESS_NAME>  <operator> <literal>
```

When you enter a filter condition, do not enter WHERE. The Designer adds the WHERE clause in the default query. To enter the filter condition, open the Expression Editor. To navigate to the Expression Editor, click the browse button.

## Join Type

Configure join conditions to join data from connected sources. You can specify any of the following join types:

- LEFT OUTER JOIN
- RIGHT OUTER JOIN
- INNER JOIN
- USER JOIN
- FULL OUTER JOIN

Use a user join to specify a filter condition in the Source Filter attribute. Enter the condition in the Source Filter expression. When you enter a join condition, the Designer adds the join to a WHERE clause in the default query. The join condition is applied in the following way:

- The table that does not have a foreign key relation with the other tables in the Source Qualifier is the first table in the join.
- The sequence of the remaining tables in the join is based on the sequence of the ports connected in the Application Source Qualifier.

## Number of Sorted Ports

Configure the number of columns used when the PowerCenter Integration Service sorts from a source. If multiple sources are attached to a single Application Source Qualifier, you can sort the rows extracted from them. If you select this option, the PowerCenter Integration Service adds an ORDER BY to the default query and sorts the specified number of columns, beginning at the top of the Application Source Qualifier. If you enter zero or do not enter a value, the PowerCenter Integration Service does not sort the data.

## SQL Query

You can override the default query. You can specify the query you want the PowerCenter Integration Service to use for querying data from the Oracle E-Business Suite sources. Enter the SQL query using the syntax supported by the source database.

If you enter an SQL query, the PowerCenter Integration Service ignores any change you make to the transformation properties. The PowerCenter Integration Service uses the SQL query to query the sources.

**Note:** To generate an SQL query, the PowerCenter Integration Service uses the business name for the ports instead of the port names. By default, in the Table and View source definitions, port name and the business name for the port are the same, but for the flexfield definitions, the business name for the port is different from the port name.

CHAPTER 5

# Oracle E-Business Suite Mappings

This chapter includes the following topics:



## Oracle E-Business Suite Target Mappings

When you write to an Oracle E-Business Suite target, configure the mapping to perform the following functionality:

- Pass values to the Open Interface Parameter group. Pass values from a source to the Open Interface Parameter group in the Oracle E-Business Suite target. All required columns are marked as not NULL. You can also pass values to other columns in the Open Interface Parameter group and to the columns in other groups.
- Generate a batch identifier. Some open interfaces process data in batches. The batch identifier is a unique value assigned to each row of data. If an open interface processes data in batches, it contains a batch identifier column in the open interface table. Configure the mapping to generate a batch identifier and pass the values to the Oracle E-Business Suite target. You can generate a batch identifier with an Oracle sequence or stored procedure.

### Passing Values to the Open Interface Parameter Group

The Open Interface Parameter group contains all the parameters required to submit a request to the concurrent manager. The Open Interface Parameter group also contains the START_TIME column.

If the Open Interface Parameter group contains a column for a batch identifier, you must pass a value to the batch identifier column. You can also pass values to other required columns in the Open Interface Parameter group based on the semantics defined for the open interface.

For example, you want to write data to the Customer Interface open interface. Customer Interface requires input values for CREATE_RECIPROCAL_CUSTOMER and START_TIME. Create a flat file source that includes these parameters as columns. Create a mapping that passes the values of the columns from the source to the required input parameters of the Oracle E-Business Suite target definition.

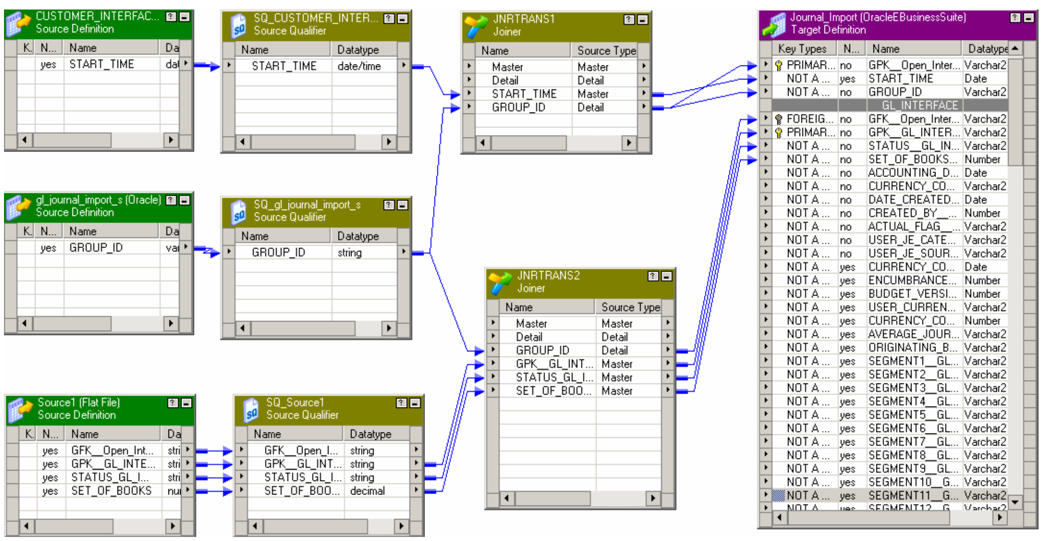
If you do not pass values to the required columns in the Open Interface Parameter group, the mapping is valid. However, the session fails at run time.

# Using an Oracle Sequence to Generate a Batch Identifier

An Oracle sequence is an Oracle database object that produces values in sequence. It starts with an initial value and increments by a given value. When Oracle E-Business Suite provides an Oracle sequence for the open interface, use the Oracle sequence to generate a batch identifier. When Oracle E-Business Suite does not provide an Oracle sequence, you can create a sequence in Oracle and add it to a source qualifier for an Oracle source definition.

This sample mapping writes data to the General Ledger Journal Entry open interface. The open interface contains a Group_ID column for the batch identifier. The sequence gl_journal_import_s generates the value for this column. The open interface includes a sequence, so you generate a batch identifier for this open interface from the sequence.

The following figure shows an example of a mapping that uses an Oracle sequence to generate a batch identifier:




The mapping contains the following objects:

- CUSTOMER_INTERFACE. Source for the Open Interface Parameter Group that contains the required start time for the target, Journal_Import.
- gl_journal_import_s. Source for an Oracle sequence. It contains a column representing the input value for the batch identifier column of the Open Interface Parameter group in the target.
- SQ_gl_journal_import_s. Source Qualifier transformation that generates a batch identifier and passes the group ID to the Joiner transformations.

  The following SELECT statement creates a unique value for each batch identifier:

  ```
  select <sequence name>.nextval from dual
  ```

  This sequence passes the group ID to the Joiner transformations.
- Source1. Source that contains the data that you want to insert into the target definition. This source definition passes the columns to the target definition.
- JNRTRANS1. Joiner transformation that joins data from the Open Interface Parameter group source and the Oracle sequence source. The Joiner transformation has manually created ports, “master” and “detail,” and uses the following join condition:

  ```
  master port_name = detail port_name
  ```

- JNRTRANS2. Joins data from the Oracle sequence source and the source containing data to insert in the target. The JNRTRANS2 Joiner transformation joins the data from Source1 and gl_journal_import_s. The Joiner transformation has manually created ports, “master” and “detail,” and uses the following join condition:

```
master port_name = detail port_name
```

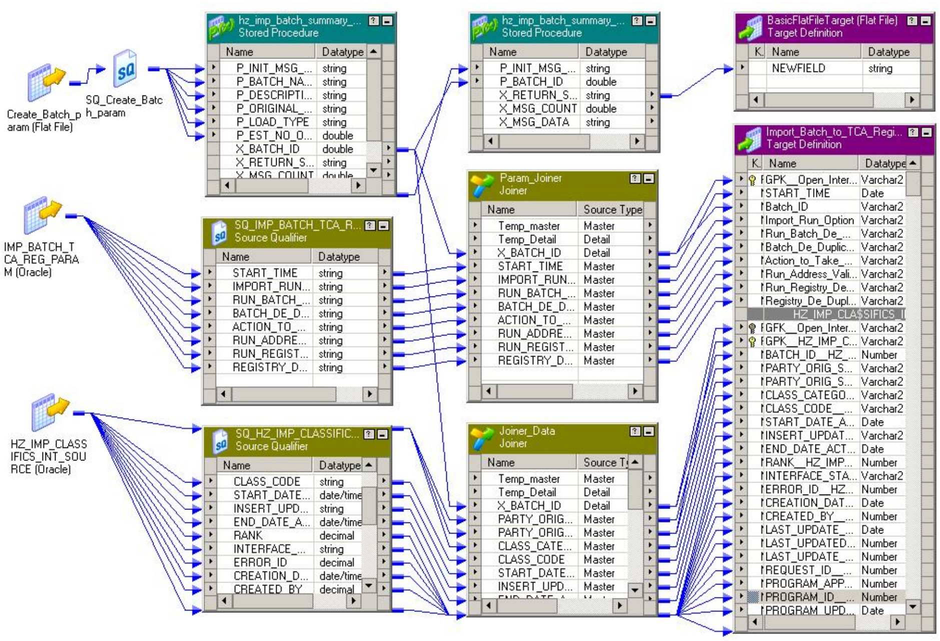
- Journal_Import. Oracle E-Business Suite target. The target definition that represents the open interface you want to write data to.

**Note:** The manually created ports, “master” and “detail,” allow you to join sources that do not have matching columns.

# Using a Stored Procedure to Generate a Batch Identifier

When Oracle E-Business Suite provides stored procedures for the open interface, use the stored procedure to generate a batch identifier. When Oracle E-Business Suite does not provide a stored procedure, you can create a stored procedure in Oracle and import it as a Stored Procedure transformation.

The following figure shows an example of a mapping that uses a stored procedure to generate a batch identifier:




The mapping contains the following objects:

- Create_Batch_param. Flat file source that contains stored procedure parameters that need to pass to the stored procedure.
- hz_imp_batch_summary. Stored Procedure transformation associated with an Oracle stored procedure. It takes the input from SQ_Create_Batch_param and generates the batch identifier.

- hz_imp_batch_summary_Activate. Stored procedure transformation that activates the batch identifier and returns the status of the batch identifier. The stored procedure output is passed to the flat file target, BasicFlatFileTarget.
- IMP_BATCH_TCA_REG_PARAM and HZ_IMP_CLASSIFICS_INT_SOURCE. Source definitions that contain data to write to the target.
- Param_Joiner. Joiner transformation that joins the data from the source qualifier, SQ_IMP_BATCH_TCA_REG_PARAM, and the Stored Procedure transformation, hz_imp_batch_summary. The Joiner transformation has manually created ports, “master” and “detail,” and uses the following join condition:

  ```
  master port_name = detail port_name
  ```
- Joiner_Data. Joiner transformation that joins the data from the source qualifier, SQ_HZ_IMP_CLASSIFIED, and the Stored Procedure transformation, hz_imp_batch_summary. The Joiner transformation has manually created ports, “master” and “detail,” and uses the following join condition:

  ```
  master port_name = detail port_name
  ```
- BasicFlatFileTarget. Flat file target that stores output from the stored procedure.
- Import_Batch_to_TCA_Register. Oracle E-Business Suite open interface that you want to write data to.

**Note:** The manually created ports, “master” and “detail,” allow you to join sources that do not have matching columns.

CHAPTER 6

# Oracle E-Business Suite Sessions

This chapter includes the following topics:



## Configure Application Connections

Before the PowerCenter Integration Service can extract data from the Oracle E-Business Suite sources or load data into the Oracle E-Business Suite targets, you must configure an application connection in the Workflow Manager. When you configure an Oracle E-Business Suite application connection, you specify the connection attributes that the PowerCenter Integration Service uses to connect to an Oracle E-Business Suite database.

1. In Workflow Manager, connect to a repository.
2. Click Connections > Application.

   The Application Connection Browser dialog box appears.
3. Click New.
4. Select E-Business Suite Connection from the Select Subtype list.
5. Click OK.

   The Connection Object Definition dialog box appears.
6. Enter the following connection information:

| Connection Attribute | Description |
| --- | --- |
| User Name | User name to connect to Oracle E-Business Suite.<br>If you are configuring a connection for an E-Business Suite target, the user name must be apps for the PowerCenter Integration Service to be able to execute the concurrent program. |
| Password | Password for the user name. You cannot use a parameter to specify the password. |

| Connection Attribute | Description |
| --- | --- |
| Connect String | ODBC data source name.<br>Use Informatica-certified ODBC drivers for ODBC data source connections. |
| Apps Schema Name | Name of the application schema that contains metadata for Oracle E-Business Suite. Default is apps. |

7. Click OK.

   The database connection appears in the Connection Browser list.
8. To add more database connections, repeat steps 2 to 7 .
9. Click OK.

# Error Handling for Oracle E-Business Suite Targets

You can set the error threshold for a session. In the Stop on Errors session property, enter the number of non-fatal errors the PowerCenter Integration Service can encounter before it stops the session.

When the PowerCenter Integration Service writes data to an Oracle E-Business Suite target, it increments the error threshold by one each time it encounters a duplicate row, orphan row, or any non-fatal error.

The following table describes behavior of the PowerCenter Integration Service based on the value of session properties:

| Stop on Errors | Orphan Row Handling | Duplicate Parent Row Handling | Description |
| --- | --- | --- | --- |
| 0 | - | - | The PowerCenter Integration Service writes all rows except the duplicate rows, orphan rows, and invalid rows to the target. |
| > 0 | Ignore | Error | If the number of duplicate rows in the source data is greater than the value of Stop on Errors, the PowerCenter Integration Service does not write data to the target and the session fails. |
| > 0 | Error | First Row or Last Row | If the number of orphan rows in the source data is greater than the value of Stop on Errors, the PowerCenter Integration Service does not write data to the target and the session fails. |

| Stop on Errors | Orphan Row Handling | Duplicate Parent Row Handling | Description |
|---|---|---|---|
| > 0 | Error | Error | If the sum of orphan row count and duplicate row count in the source data is greater than the value of Stop on Errors, the PowerCenter Integration Service does not write data to the target and the session fails. |
| > 0 | Ignore | First Row or Last Row | The PowerCenter Integration Service starts writing data to the target. If the non-fatal error count exceeds the value of Stop on Errors, the PowerCenter Integration Service does not write data to the target for that hierarchy and the session fails. However, the PowerCenter Integration Service writes the data to the target for the previous hierarchies. |

The PowerCenter Integration Service processes data in hierarchies, which are also called batches. When the session fails, the PowerCenter Integration Service rolls back the complete hierarchy. The PowerCenter Integration Service does not commit partial hierarchy to the target, and ignores the commit type and commit interval.

If you set Stop on Errors to a value greater than 0, Orphan Row Handling and Duplicate Parent Row Handling to Error, and the sum of duplicate row count and orphan row count is less than the value of error threshold, the PowerCenter Integration Service starts writing data to the target table for the hierarchy. When the PowerCenter Integration Service starts writing the data to the target, and the sum of duplicate row count, orphan row count, and other error count exceeds the error threshold, the PowerCenter Integration Service does not write data to the target for that hierarchy and the session fails. However, the PowerCenter Integration Service writes the data to the target for all the previous hierarchies.

For example, you want to write data to the Claim Import open interface. You set the value for Stop on Errors to 5, Orphan Row Handling to Error, and Duplicate Parent Row Handling to Error. Each claim has 10 claim lines.

The PowerCenter Integration Service could not write two lines in the first claim to the target because of an orphan row error. The PowerCenter Integration Service commits the data to the target because the error threshold is less than five. The PowerCenter Integration Service encountered four orphan row errors when processing the second claim for the target. A total of six errors caused the error threshold to be reached. The PowerCenter Integration Service rolls back the complete hierarchy and the session fails.

# Configuring an Oracle E-Business Suite Session

You can configure a session for an Oracle E-Business Suite mapping. In the Task Developer, create a session and associate it with a mapping containing an Oracle E-Business Suite source definition or an Oracle E-Business Suite target definition. Configure an Oracle E-Business Suite application connection for the Oracle E-Business Suite source definition or the Oracle E-Business Suite target definition before you run the workflow.

## Configuring Session Properties for an Oracle E-Business Suite Target

The following table describes the session properties for an Oracle E-Business Suite target:

| Target Options | Description |
| --- | --- |
| Truncate Table | Truncates interface tables before loading data to the target. |
| Execute Concurrent Program | Executes the concurrent program associated with the open interface.<br>Default is disabled. |
| Wait for Result | Displays the result of the concurrent program after its completion. This option is valid only if Execute Concurrent Program is enabled.<br>Default is disabled. |
| Interval | Interval in seconds for polling the status of the concurrent program.<br>If you do not want to poll the concurrent program, enter 0. Default is 10 seconds. |
| Max Wait | Maximum wait time in seconds to wait for the results of the concurrent program. This option is valid only when you enable Wait for Result.<br>If you do not want to poll the concurrent program, enter 0. Default is 0. |
| Skip Hierarchy Validation | Writes data to the interface tables without maintaining data integrity. By default, the PowerCenter Integration Service maintains data integrity when loading data. |
| Duplicate Parent Row Handling | Determines how to handle duplicate parent rows during a session. You can specify the following values:<br>- First Row. Passes the first row as a valid row and discards the rest of the duplicate rows.<br>- Last Row. Passes the last row as a valid row and discards the rest of the duplicate rows.<br>- Error. Passes the first row to the target. For subsequent duplicate rows the error count is incremented.<br>If you select the Skip Hierarchy Validation option, the PowerCenter Integration Service ignores this session property when writing data to the interface tables. |
| Orphan Row Handling | Determines how to handle orphan rows during a session. You can specify the following values:<br>- Ignore. Ignores the orphan rows. No log message appears in the session log.<br>- Error. Orphan rows are treated as errors. The orphan row count is incremented for each row.<br>If you select the Skip Hierarchy Validation option, the PowerCenter Integration Service ignores this session property when writing data to the interface tables. |
| Cache Directory | Directory to cache E-Business Suite target data. The default is $PMCacheDir service process variable. If you select the Skip Hierarchy Validation option, the PowerCenter Integration Service ignores this session property when writing data to the interface tables. |
| Language | Language for the target parameters. |
| User Name | User name to initialize the Oracle application. |
| Responsibility Name | Responsibility name to initialize the Oracle application. |
| Security Group Name | Security Group name to initialize the Oracle application. |
| Server Name | Server name to initialize the Oracle application. |

| Target Options | Description |
| --- | --- |
| Schema Name | Open interface schema list. |
| Cache Size Value | Maximum buffer size in bytes to cache Oracle E-Business Suite target data. Minimum value is 80 KB. Default is 10 MB. If you select the Skip Hierarchy Validation option, the PowerCenter Integration Service ignores this session property when writing data to the interface tables. |
| Commit Interval[1] | Determines the number of rows after which the PowerCenter Integration Service commits data to an interface table. Default is 10000 rows. If you do not select the Skip Hierarchy Validation option, the PowerCenter Integration Service ignores this session property when writing data to the interface tables. |

*1. PowerExchange for Oracle E-Business Suite does not support PowerCenter Commit Interval and Commit Type session properties.*

## Session Log Enhancements

In the normal mode, for each group in a partition, the session log displays load statistics for the requested, applied, affected, and rejected rows. Additionally, the session log also displays the number of orphan rows and duplicate rows for each partition in the normal mode.

**Note:** You can view load statistics in the session log. The load summary in the Workflow Monitor does not display load statistics.

# Troubleshooting Oracle E-Business Suite Sessions

### I cannot view the target statistics in the Properties window.

If you do not select the Skip Hierarchy Validation session property, the PowerCenter Integration Service does not display target statistics in the Properties window. You can view the statistics in the session log.

APPENDIX A

# Datatype Reference

This appendix includes the following topic:



## Oracle E-Business Suite and Transformation Datatypes

PowerCenter uses the following datatypes in Oracle E-Business Suite mappings:

- Oracle E-Business Suite native datatypes. The Oracle E-Business Suite datatypes appear in the Oracle E-Business Suite definitions in a mapping.
- Transformation datatypes. Set of datatypes that appear in the transformations. They are internal datatypes based on ANSI SQL-92 generic datatypes, which the PowerCenter Integration Service uses to move data across platforms. They appear in all transformations in a mapping.

When the PowerCenter Integration Service reads source data, it converts the native datatypes to the comparable transformation datatypes before transforming the data. When the PowerCenter Integration Service writes to a target, it converts the transformation datatypes to the comparable native datatypes.

The following table lists the Oracle E-Business Suite datatypes that PowerCenter supports and the corresponding transformation datatypes:

| Oracle E-Business Suite Datatype | Description | Transformation Datatype | Description |
|---|---|---|---|
| Blob | Up to 4 GB | Binary | 1 to 104,857,600 bytes |
| Clob | Up to 4 GB | Text | 1 to 104,857,600 characters |
| Date | Jan. 1, 4712 B.C. to Dec. 31, 4712 A.D. | Date/Time | Jan 1, 0001 A.D. to Dec 31, 9999 A.D. (precision to nanosecond) |
| Long | Up to 2 GB | Text | 1 to 104,857,600 characters<br>If you include Long data in a mapping, the PowerCenter Integration Service converts it to the transformation String datatype, and truncates it to 104,857,600 characters. |

| Oracle E-Business Suite Datatype | Description | Transformation Datatype | Description |
| --- | --- | --- | --- |
| LongRaw | Up to 2 GB | Binary | 1 to 104,857,600 bytes |
| Number | Precision 1 to 38 | Double | Precision 15 |
| Raw | 1 to 2,000 bytes | Binary | 1 to 104,857,600 bytes |
| Varchar | 1 to 4,000 bytes | String | 1 to 104,857,600 characters |

APPENDIX B

# Error Messages

This appendix includes the following topic:



## Designer Messages

**Cannot initialize connection to Oracle E-Business Suite.**

Explanation: Internal error.

User Response: Contact Informatica Global Customer Support.

**Cannot start ODBC Data Source Administrator.**

Explanation: ODBC Data Source Administrator cannot open for adding or removing DSN.

User Response: Use the Control Panel for creating or removing ODBC DSN.

**Failed to add menu item Create E-Business Suite Source.**

Explanation: Internal error.

User Response: Contact Informatica Global Customer Support.

**Failed to add menu item Create E-Business Suite Target.**

Explanation: Internal error.

User Response: Contact Informatica Global Customer Support.

**Failed to create XercesDOMParser object.**

Explanation: Internal error.

User Response: Contact Informatica Global Customer Support.

**Failed to get fields for flexfield.**

Explanation: The Designer could not get fields for the specified flexfield.

User Response: Restart the Oracle E-Business Suite Import Wizard.

**Failed to get fields for view.**

Explanation: The Designer could not get fields for the specified view.

User Response: Restart the Oracle E-Business Suite Import Wizard.

### Failed to get fields of table.

Explanation: The Designer could not get fields for the specified table.

User Response: Restart the Oracle E-Business Suite Import Wizard.

### Failed to load file.

Explanation: Interfacelist.xml file either not found or has invalid data.

User Response: Contact Informatica Global Customer Support.

### Invalid filter for Description.

Explanation: The filter condition uses invalid SQL or regular expression syntax.

User Response: Use valid SQL or regular expression syntax for the filter condition.

### Invalid filter for Name.

Explanation: The filter condition uses invalid SQL or regular expression syntax.

User Response: Use valid SQL or regular expression syntax for the filter condition.

### Parsing failed.

Explanation: The Designer could not create a source or target definition for the selected Open Interface tables.

User Response: Reimport the Open Interface tables.

### PowerExchange for Oracle E-Business Suite is not enabled on PowerCenter or the license is expired. Contact Informatica Global Customer Support. The available license for Oracle E-Business Suite is invalid.

Explanation: The available license for Oracle E-Business Suite is invalid.

User Response: Get a new license for Oracle E-Business Suite.

### XML parser initialization failed.

Explanation: Internal error.

User Response: Contact Informatica Global Customer Support.

APPENDIX C

# Glossary

**application tier**

A tier that supports and manages various application components. It hosts servers that process the business logic. It also manages communication between the desktop tier and the database tier.

**CONCATENATED_PORT field**

A field added by the Designer when you import a source definition with a flexfield. This field concatenates all other fields separated by the delimiter defined in Oracle E-Business Suite.

**concurrent manager**

An Oracle E-Business Suite manager used to ensure applications are not overwhelmed with requests. Also manages batch processing and report generation.

**database tier**

A tier that supports and manages the Oracle database. PowerExchange for Oracle E-Business Suite interacts with the database tier to extract metadata and data.

**desktop tier**

A tier that provides a user interface through an add-on component to a standard Web browser.

**flexfield**

A placeholder set of fields that can be configured by customers for use by their organizations. Flexfields can consist of multiple segments for entry of codes.

**interface table**

A set of Oracle tables designed to load data.

**open interface**

An Oracle interface used to write data to applications. Contains multiple interface tables.

**tier**

A logical grouping of services that may be spread across more than one physical machine.

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