PeopleSoft®

# PeopleSoft Data Transformer for Financials, Enterprise Service Automation and Supply Chain Management 8.8 PeopleBook

**December 2003**

PeopleSoft Data Transformer for Financials, Enterprise Service Automation and Supply Chain Management 8.8 PeopleBook
SKU FSCM88DTR-B 1203


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# Contents

# About These PeopleBooks

PeopleBooks provide you with the information that you need to implement and use PeopleSoft applications.

This preface discusses:

- PeopleSoft application prerequisites.
- PeopleSoft application fundamentals.
- Related documentation.
- Typographical elements and visual cues.
- Comments and suggestions.
- Common elements in PeopleBooks.

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**Note.** PeopleBooks document only page elements that require additional explanation. If a page element is not documented with the process or task in which it is used, then either it requires no additional explanation or it is documented with common elements for the section, chapter, PeopleBook, or product line. Elements that are common to all PeopleSoft applications are defined in this preface.

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## PeopleSoft Application Prerequisites

To benefit fully from the information that is covered in these books, you should have a basic understanding of how to use PeopleSoft applications.

See *Using PeopleSoft Applications.*

You might also want to complete at least one PeopleSoft introductory training course.

You should be familiar with navigating the system and adding, updating, and deleting information by using PeopleSoft windows, menus, and pages. You should also be comfortable using the World Wide Web and the Microsoft Windows or Windows NT graphical user interface.

These books do not review navigation and other basics. They present the information that you need to use the system and implement your PeopleSoft applications most effectively.

## PeopleSoft Application Fundamentals

Each application PeopleBook provides implementation and processing information for your PeopleSoft database. However, additional, essential information describing the setup and design of your system appears in a companion volume of documentation called the application fundamentals PeopleBook. Each PeopleSoft product line has its own version of this documentation.

The application fundamentals PeopleBook consists of important topics that apply to many or all PeopleSoft applications across a product line. Whether you are implementing a single application, some combination of applications within the product line, or the entire product line, you should be familiar with the contents of this central PeopleBook. It is the starting point for fundamentals, such as setting up control tables and administering security.

# Related Documentation

This section discusses how to:

- Obtain documentation updates.
- Order printed documentation.

## Obtaining Documentation Updates

You can find updates and additional documentation for this release, as well as previous releases, on the PeopleSoft Customer Connection web site. Through the Documentation section of PeopleSoft Customer Connection, you can download files to add to your PeopleBook Library. You'll find a variety of useful and timely materials, including updates to the full PeopleSoft documentation that is delivered on your PeopleBooks CD-ROM.

**Important!** Before you upgrade, you must check PeopleSoft Customer Connection for updates to the upgrade instructions. PeopleSoft continually posts updates as the upgrade process is refined.

### See Also

PeopleSoft Customer Connection web site, http://www.peoplesoft.com/corp/en/login.asp

## Ordering Printed Documentation

You can order printed, bound volumes of the complete PeopleSoft documentation that is delivered on your PeopleBooks CD-ROM. PeopleSoft makes printed documentation available for each major release shortly after the software is shipped. Customers and partners can order printed PeopleSoft documentation by using any of these methods:

- Web
- Telephone
- Email

### Web

From the Documentation section of the PeopleSoft Customer Connection web site, access the PeopleSoft Press web site under the Ordering PeopleBooks topic. The PeopleSoft Press web site is a joint venture between PeopleSoft and Consolidated Publications Incorporated (CPI), the book print vendor. Use a credit card, money order, cashier's check, or purchase order to place your order.

### Telephone

Contact CPI at 800 888 3559.

### Email

Send email to CPI at psoftpress@cc.larwood.com.

### See Also

PeopleSoft Customer Connection web site, http://www.peoplesoft.com/corp/en/login.asp

# Typographical Conventions and Visual Cues

This section discusses:

- Typographical conventions.
- Visual cues.

## Typographical Conventions

The following table contains the typographical conventions that are used in PeopleBooks:

| Typographical Convention or Visual Cue | Description |
|---|---|
| **Bold** | Indicates PeopleCode function names, method names, language constructs, and PeopleCode reserved words that must be included literally in the function call. |
| *Italics* | Indicates field values, emphasis, and PeopleSoft or other book-length publication titles. In PeopleCode syntax, italic items are placeholders for arguments that your program must supply.<br>We also use italics when we refer to words as words or letters as letters, as in the following: Enter the number 0, not the letter *O*. |
| KEY+KEY | Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For ALT+W, hold down the ALT key while you press W. |
| `Monospace font` | Indicates a PeopleCode program or other code example. |
| " " (quotation marks) | Indicate chapter titles in cross-references and words that are used differently from their intended meanings. |

| Typographical Convention or Visual Cue | Description |
|---|---|
| . . . (ellipses) | Indicate that the preceding item or series can be repeated any number of times in PeopleCode syntax. |
| { } (curly braces) | Indicate a choice between two options in PeopleCode syntax. Options are separated by a pipe ( \| ). |
| [ ] (square brackets) | Indicate optional items in PeopleCode syntax. |
| & (ampersand) | When placed before a parameter in PeopleCode syntax, an ampersand indicates that the parameter is an already instantiated object.<br><br>Ampersands also precede all PeopleCode variables. |
| (ISO) | Information that applies to a specific country, to the U.S. federal government, or to the education and government market, is preceded by a three-letter code in parentheses.<br><br>The code for the U.S. federal government is USF; the code for education and government is E&G, and the country codes from the International Standards Organization are used for specific countries. Here is an example:<br><br>(GER) If you're administering German employees, German law requires you to indicate special nationality and citizenship information for German workers using nationality codes established by the German DEUEV Directive. |
| Cross-references | PeopleBooks provide cross-references either below the heading "See Also" or on a separate line preceded by the word *See*. Cross-references lead to other documentation that is pertinent to the immediately preceding documentation. |

# Visual Cues

PeopleBooks contain the following visual cues.

## Notes

Notes indicate information that you should pay particular attention to as you work with the PeopleSoft system.

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**Note.** Example of a note.

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A note that is preceded by *Important!* is crucial and includes information that concerns what you must do for the system to function properly.

**Important!** Example of an important note.

### Warnings

Warnings indicate crucial configuration considerations. Pay close attention to warning messages.

***Warning!*** Example of a warning.

## Comments and Suggestions

Your comments are important to us. We encourage you to tell us what you like, or what you would like to see changed about PeopleBooks and other PeopleSoft reference and training materials. Please send your suggestions to:

PeopleSoft Product Documentation Manager PeopleSoft, Inc. 4460 Hacienda Drive Pleasanton, CA 94588

Or send email comments to doc@peoplesoft.com.

While we cannot guarantee to answer every email message, we will pay careful attention to your comments and suggestions.

## Common Elements in These PeopleBooks

| | |
|---|---|
| **As of Date** | The last date for which a report or process includes data. |
| **Business Unit** | An ID that represents a high-level organization of business information. You can use a business unit to define regional or departmental units within a larger organization. |
| **Description** | Enter up to 30 characters of text. |
| **Effective Date** | The date on which a table row becomes effective; the date that an action begins. For example, to close out a ledger on June 30, the effective date for the ledger closing would be July 1. This date also determines when you can view and change the information. Pages or panels and batch processes that use the information use the current row. |
| **Once, Always,** and **Don't Run** | Select Once to run the request the next time the batch process runs. After the batch process runs, the process frequency is automatically set to Don't Run.<br>Select Always to run the request every time the batch process runs.<br>Select Don't Run to ignore the request when the batch process runs. |
| **Report Manager** | Click to access the Report List page, where you can view report content, check the status of a report, and see content detail messages (which show you a description of the report and the distribution list). |

| | |
|---|---|
| **Process Monitor** | Click to access the Process List page, where you can view the status of submitted process requests. |
| **Run** | Click to access the Process Scheduler request page, where you can specify the location where a process or job runs and the process output format. |
| **Request ID** | An ID that represents a set of selection criteria for a report or process. |
| **User ID** | An ID that represents the person who generates a transaction. |
| **SetID** | An ID that represents a set of control table information, or TableSets. TableSets enable you to share control table information and processing options among business units. The goal is to minimize redundant data and system maintenance tasks. When you assign a setID to a record group in a business unit, you indicate that all of the tables in the record group are shared between that business unit and any other business unit that also assigns that setID to that record group. For example, you can define a group of common job codes that are shared between several business units. Each business unit that shares the job codes is assigned the same setID for that record group. |
| **Short Description** | Enter up to 15 characters of text. |

## See Also

*Using PeopleSoft Applications*

*PeopleSoft Process Scheduler*

# PeopleSoft Data Transformer Preface

This preface discusses PeopleSoft Data Transformer.

## PeopleSoft Data Transformer

PeopleSoft Data Transformer enables you to extract, transform, and load data from remote or local data sources to a data source of your choice. PeopleSoft Data Transformer handles high volume data transfers and transformation processing and is configured to provide maximum performance between PeopleSoft applications.

# CHAPTER 1

# Getting Started with PeopleSoft Data Transformer

This chapter provides an overview of PeopleSoft Data Transformer and discusses:

- PeopleSoft Data Transformer business processes.
- PeopleSoft Data Transformer implementation.

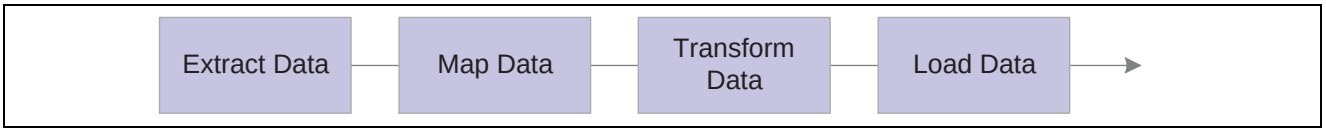
## PeopleSoft Data Transformer Overview

PeopleSoft Data Transformer enables organizations to extract, transform, and load data from remote or local data sources to a target data source. Tasks that you perform in PeopleSoft Data Transformer, to prepare the data for transfer, include:

- Setting up default target fields.
- Defining transformation and filtering rules to convert data.
- Creating map rules.
- Creating map definitions.

## PeopleSoft Data Transformer Business Processes

The following process flow illustrates the PeopleSoft Data Transformer business processes:




PeopleSoft Data Transformer business process flow

## PeopleSoft Data Transformer Implementation

The PeopleSoft Data Transformer implementation can be divided into two phases:

- Setting up core PeopleSoft Data Transformer features.
- Creating source data objects.

Complete these phases to support PeopleSoft Data Transformer features.

In the planning phase of your implementation, take advantage of all PeopleSoft sources of implementation, including the installation guides and business process maps.

## Setting Up Core PeopleSoft Data Transformer Features

To set up core PeopleSoft Data Transformer features, perform the following steps:

| Step | Reference |
|---|---|
| 1. Define remote database connections. | Chapter 2, "Setting Up Core PeopleSoft Data Transformer Features," Defining Remote Database Connections, page 3 |
| 2. Define installation options. | Chapter 2, "Setting Up Core PeopleSoft Data Transformer Features," Defining Installation Options, page 6 |
| 3. Define subject areas. | Chapter 2, "Setting Up Core PeopleSoft Data Transformer Features," Defining Subject Areas, page 7 |

## Creating Source Data Objects

To set up source data objects, perform the following steps:

| Step | Reference |
|---|---|
| 1. Create basic source data objects. | Chapter 3, "Creating Source Data Objects," Creating Basic Source Data Objects, page 11 |
| 2. (Optional) Create expressions. | Chapter 3, "Creating Source Data Objects," (Optional) Creating Expressions, page 16 |
| 3. (Optional) Create filters. | Chapter 3, "Creating Source Data Objects," (Optional) Creating Filters, page 22 |
| 4. (Optional) Join records. | Chapter 3, "Creating Source Data Objects," (Optional) Joining Records, page 24 |

# CHAPTER 2

# Setting Up Core PeopleSoft Data Transformer Features

This chapter discusses how to:

- Define remote database connections.
- Define installation options.
- Define subject areas.

**Note.** These activities are typically one-time events and require minimal maintenance.

## Defining Remote Database Connections

This section provides an overview of remote database connections and discusses how to define remote database connections.

### Understanding Remote Database Connections

Data sources represent the location of the source data that is extracted, transformed, and loaded to the target. Remote data source data is extracted from a separate (remote) database and migrated into the local database. You must define remote database connections to source data from a database other than your local PeopleSoft database instance.

The Remote Database Access Management page enables you to define connectivity information for relational databases to be used for sourcing data for PeopleSoft Data Transformer. You can define connectivity information only for databases of the same type as the Target PeopleSoft database instance. For example, if the PeopleSoft database instance is Oracle, then you can define only Oracle remote connections. Remote database connections are established once for a local connect and once for each database that will be sourced. You must define one local connection for the current PeopleSoft instance. This connection is used during remote database access to retrieve information for the target database.

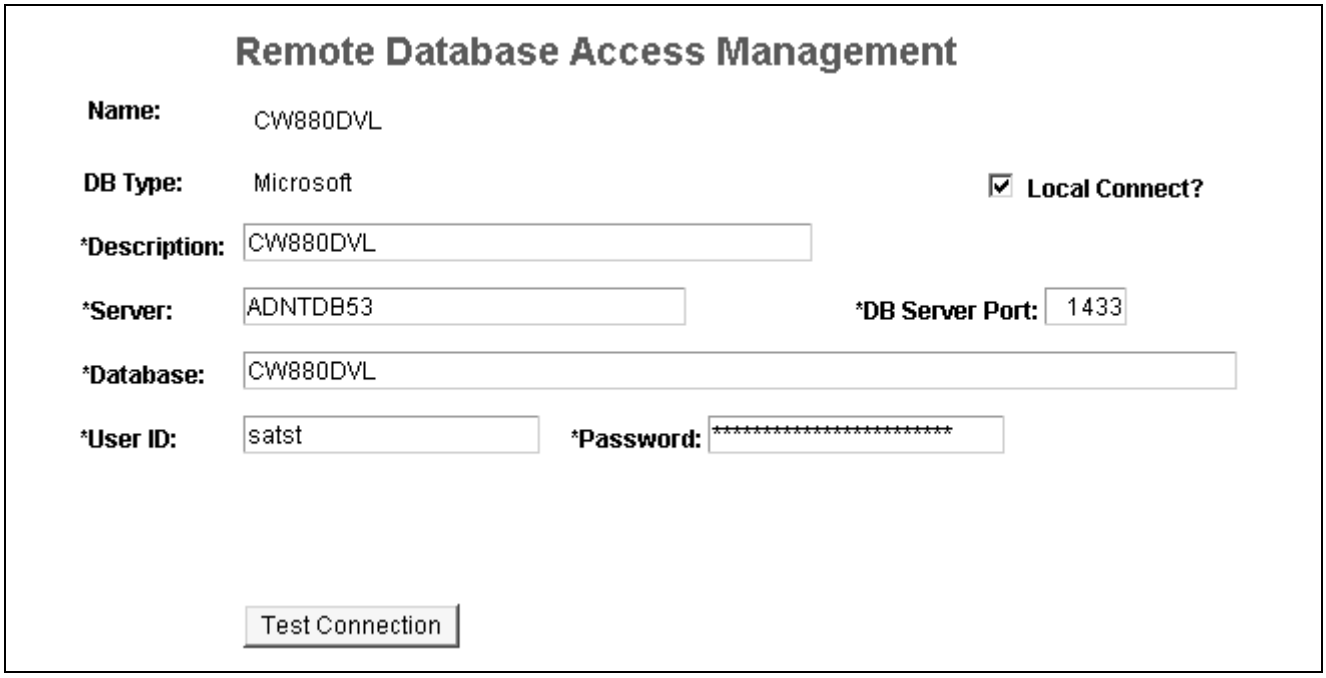
**Note.** If you are accessing data from a local database, then you do not need to set up remote database connections.

## Page Used to Define Remote Database Connections

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Remote Database Access Management | REMOTEDB | Enterprise Components, Warehouse Tools, Warehouse Tools Home, Remote Database Connection, Remote Database Access Management | Define remote database connections. |

## Defining Remote Database Connections

Access the Remote Database Access Management page.




Remote Database Access Management page

**Important!** Different fields may appear on the page based on the database DB type. The preceding page shows fields for *Microsoft, DB2 (OS/390), DB2/UNIX,* and *Sybase.*

This table illustrates the page variance by database type:

| Database Type | Required Information |
|---|---|
| Microsoft, DB2 (OS/390), DB2/UNIX, and Sybase | Enter a description, server, database, userID, and password. |

| Database Type | Required Information |
|---|---|
| Informix | Enter a description, server, user ID, password, and Inf Svr (Informix Server) name. |
| Oracle | For Oracle and a Connection Type of *TNSNames*, enter a description, TNS Entry, user ID and password.<br><br>**Note.** TNS Names is a preconfigured file (tnsnames.ora) with previously defined database connection information.<br><br>Select a connection type of *Specific* if you want to set up a database that does not already have a TNS Entry defined, or when you don't want to use the TNS entry. |

**Name** Displays the remote DB name entered on the Search page for your database.

**DB Type** Displays the database type of your PeopleSoft database.

**Note.** Since your remote database must be of the same type, this field is defaulted to your current local database type.

**Local Connect** Select if you are defining the remote connection information for your local database. All others must be specified as remote databases. An error displays if you save a page with a connection checked as a Local Connect and there is already one identified as such (in the PSREMOTEDBDEFN table).

**Important!** One connection must be defined as the Local Connect, the connection information for the current PeopleSoft instance (the local database). This connection is used during remote database access to retrieve connection information for the source and as the target database for the sourced data.

**Server** Enter the name of the server where the database resides.

**Note.** This field is platform specific.

**DB Server Port** The DB Server Port number is automatically populated with a default value based on the database type. It may need to be changed depending upon your database server configuration.

**User ID** and **Password** Enter the user ID and password that are required to access the database.

The password is not displayed.

**Note.** This field is platform specific.

**Test Connect** Click to access the remote database by using the information that you have entered. This will verify that all of the connection information is correct.

## See Also

*PeopleSoft Hardware and Software Guide*

# Defining Installation Options

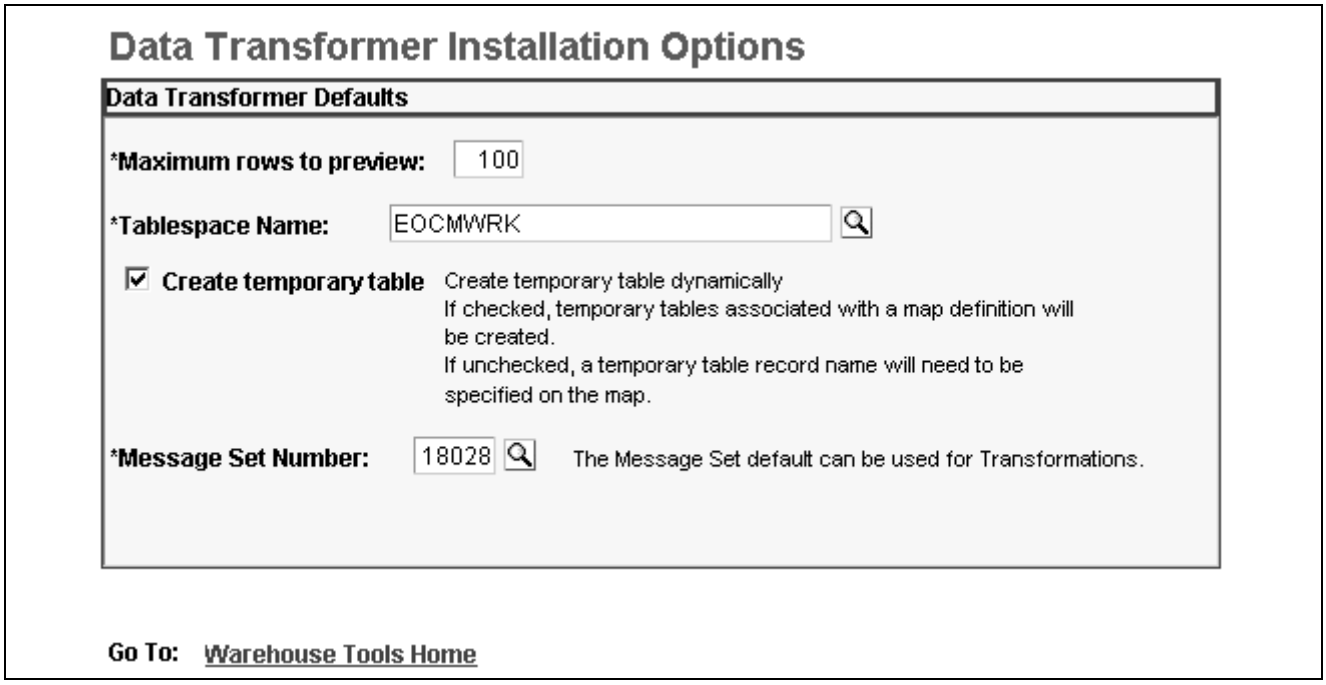
This section discusses how to define installation options.

## Page Used to Define Installation Options

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Data Transformer Installation Options | EOEW_OPTIONS | Enterprise Components, Warehouse Tools, Warehouse Tools Home, Data Transformer Installation Options | Define installation options. |

## Defining Installation Options

Access the Data Transformer Installation Options page.




Data Transformer Installation Options page

System administrators may use PeopleSoft Data Transformer installation options to set certain high-level Data Transformer defaults such as the maximum number of rows to return on a preview of sourced or transformed data, a table space name to be used to dynamically build temporary tables, and the default message set number assignment for transformation error correction.

**Maximum Rows to Preview** Enter the maximum number of rows of sourced or transformed data to preview.

Keep this value relatively low, for example 100 rows, as larger values significantly increase the amount of time it takes to retrieve data and render the preview pages.

**Tablespace Name** Enter the tablespace name for the temporary table that is built dynamically at runtime. This tablespace name is applied to all of the temporary tables unless overridden at a lower level.

**Note.** This name can be overridden at the subject area and map option levels.

**Create Temporary Table** Select to create temporary tables dynamically.

A temporary table is created at runtime—it's needed by the engine during processing only, then it's deleted at completion. It is not available in PeopleSoft metadata. If the checkbox is cleared, you must specify a temporary table record name on the map for use at runtime. This temporary table will be available in PeopleSoft metadata and remain after the engine processing.

**Note.** Determining which of these options to use needs to be considered carefully. A dynamic temporary table will automatically change when the map changes, conversely, a non-dynamic temporary table will not change and may require more maintenance.

**Message Set Number** Select a message set number that corresponds to a text error message set. When adding a new transformation and associating a specific error message with an error, this default message set number is used as a starting point.

### See Also

Chapter 5, "Creating Maps," Previewing Map Results, page 51

Chapter 5, "Creating Maps," Updating Map Processing Options, page 52

Chapter 4, "Preparing to Create Maps," Creating Message Definitions, page 38

# Defining Subject Areas

This section provides an overview of subject areas and discusses how to define subject areas.

## Understanding Subject Areas

Use subject areas as a grouping mechanism on translation sets, transformations, map rules and map definitions. These objects can only be shared within a subject area. An enterprise subject area can be used for objects that are to be shared by all subject areas.

You need to carefully plan subject areas when you implement PeopleSoft Data Transformer. For example, you need to consider how the Data Transformer objects (translation sets, transformations, map rules, map definitions, and so on) can be grouped most efficiently. Some objects need to be available to all users, while some only to a specific user or functional group.

**Note.** Subject areas affect only prompting and object selection and do not reflect object security.

You can set up default tablespaces, or you can dynamically create temporary tables by subject area. If an implementation requires that only groups of maps dynamically generate temporary tables, or are built within different tablespaces, you can specify this at the subject area level.

### See Also

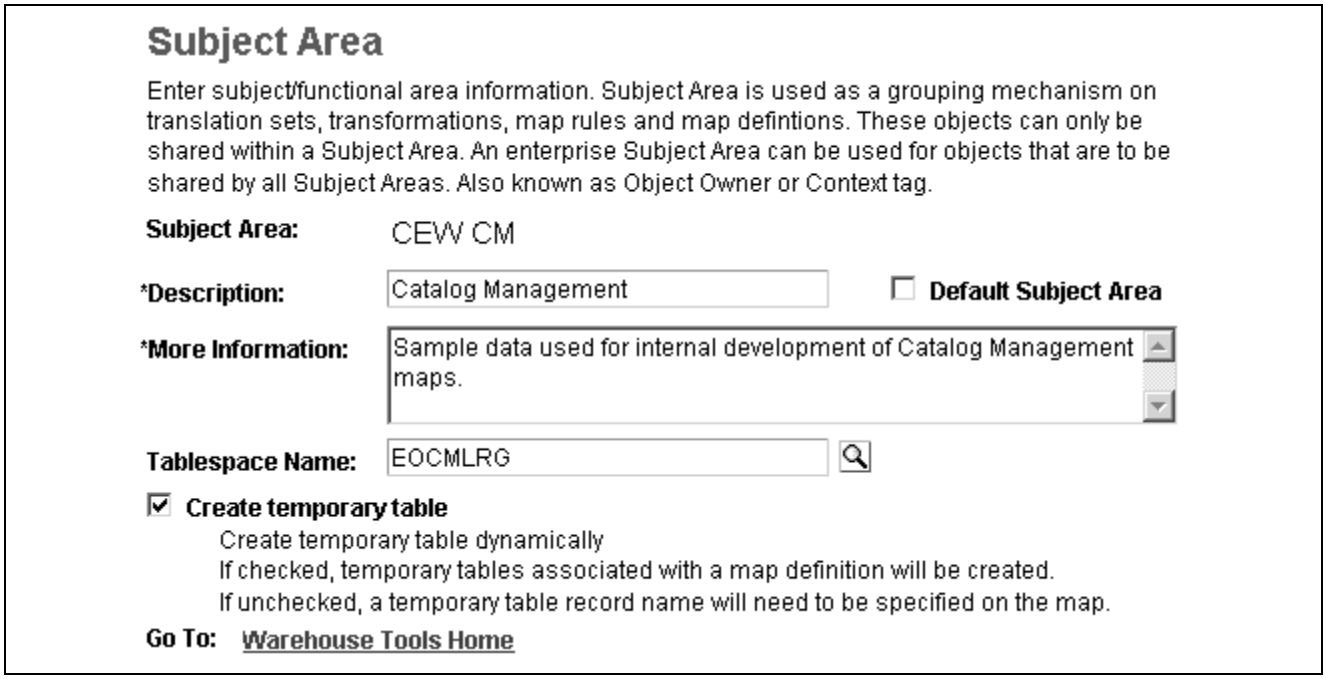
Chapter 4, "Preparing to Create Maps," page 27

## Page Used to Define Subject Areas

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Subject Area | EOEW_OBJ_OWNER | Enterprise Components, Warehouse Tools, Warehouse Tools Home, Subject Areas | Define subject areas to group translation sets, transformations, map rules, and map definitions. |

## Defining Subject Areas

Access the Subject Area page.




Subject Area page

**Default Subject Area** Select to use this subject area as your default subject area.

**Note.** Only one subject area can be selected as the default, which becomes available to all users—it is your enterprise subject area.

**Tablespace Name** Select the tablespace name to use if you want to override the Data Transformer installation options selection for this subject area.

**Note.** This is needed only when an implementation shares dynamically generated temporary tables over multiple tablespaces.

For example, the CEW EO temporary tables may be assigned to a special tablespace because the table size in this area is expected to be larger than other tables. For that subject area, an override tablespace name would be entered. The CEW CM subject area contains unique tables that also need special segmentation. For that subject area, an override tablespace name would be entered. All other subject areas would have a blank tablespace name therefore defaulting to the Data Transformer installation options tablespace name.

**Create Temporary Table** Select if you want to override the Data Transformer installation options selection for this subject area.

This is needed only when an implementation allows or disallows the dynamic temporary table creation per subject area.

# CHAPTER 3

# Creating Source Data Objects

This chapter provides an overview of source data objects and discusses how to:

- Create basic source data objects.
- Create expressions.
- Create filters.
- Join records.

## Understanding Source Data Objects

A source data object is the input to every map definition and defines the data to be extracted from the source. The business requirement of the map definition dictates the appropriate structure of the source data object, which can be as basic as requiring only an object definition and the fields to be used in the extract SQL specified, or quite complex containing expressions, multiple table joins, and filtering criteria.

### Common Elements Used to Create Source Data Objects

**Data Source** — One or more record definitions joined by common fields.

**Source Data Object** — Enter a unique value of up to 30 characters, with no spaces or special characters. The system automatically converts the value to uppercase.

This value, along with the description from the definition page, appears at the top of each page of the Source Data Object component.

## Creating Basic Source Data Objects

This section discusses how to:

- Define source data objects.
- Specify source data object fields.
- Preview results.
- Preview SQL.

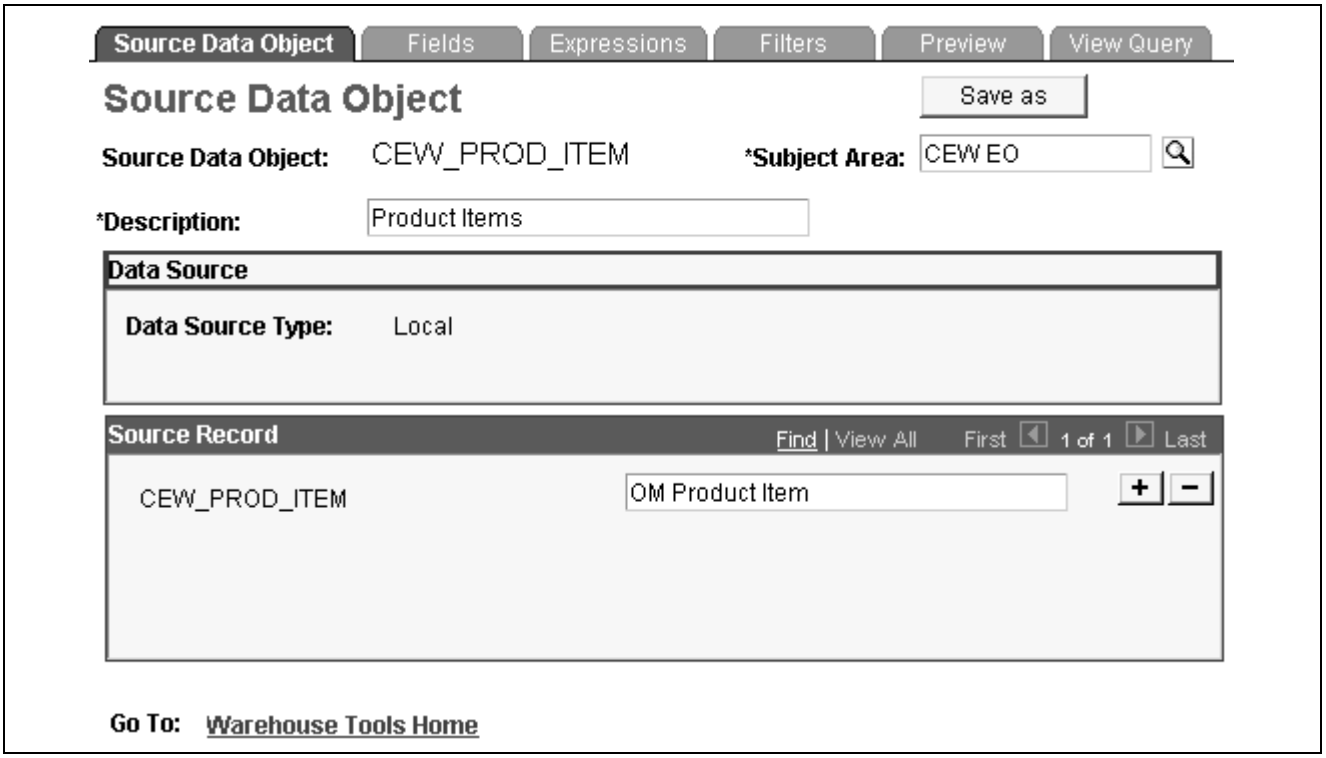
**Note.** All remote source databases must be of the same database type as the local PeopleSoft database instance. For example, if your PeopleSoft application is running on DB2/UNIX then you may only define DB2/UNIX source databases.

## Pages Used to Create Basic Source Data Objects

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Source Data Object | EOEW_SRCDO | Enterprise Components, Warehouse Tools, Warehouse Tools Homepage, Source Data Object, Source Data Object | Create source data object definitions. |
| Fields | EOEW_SRCFIELD | Enterprise Components, Warehouse Tools, Warehouse Tools Homepage, Source Data Object, Source Data Object, Fields | Specify the fields to include in the source data object. |
| Preview | EOEW_SRCPREVIEW | Enterprise Components, Warehouse Tools, Warehouse Tools Homepage, Source Data Object, Source Data Object, Preview | Review the results and check the validity of the source data object. |
| View Query | EOEW_SRCQUERY | Enterprise Components, Warehouse Tools, Warehouse Tools Homepage, Source Data Object, Source Data Object, View Query | Generate and view the SQL based on the source data object definition. |

## Defining Source Data Objects

Access the Source Data Object page.




Source Data Object page

**Subject Area** Select a subject area.

For new source data objects, the subject area will be set to the default as defined on the Subject Area page.

**Data Source Type** *Local:* select to use PeopleSoft-defined records from the current database.

*Remote:* select to access the remote database connection information and use records from a remote database. Select the desired data source for remote.

---

**Note.** The Data Source Type can only be selected in Add mode. If you want to change this value, you will need to create a new Source Data Object.

---

**Source Record** Select the source records from which to extract data. This record is placed in the From clause in the extract SQL.

If multiple records are selected, join conditions are required.

---

**Note.** To change a record that is associated with a source data object, you must delete the existing record and then add the new record.

---

**Save As** Click to save an existing source data object under a new name.

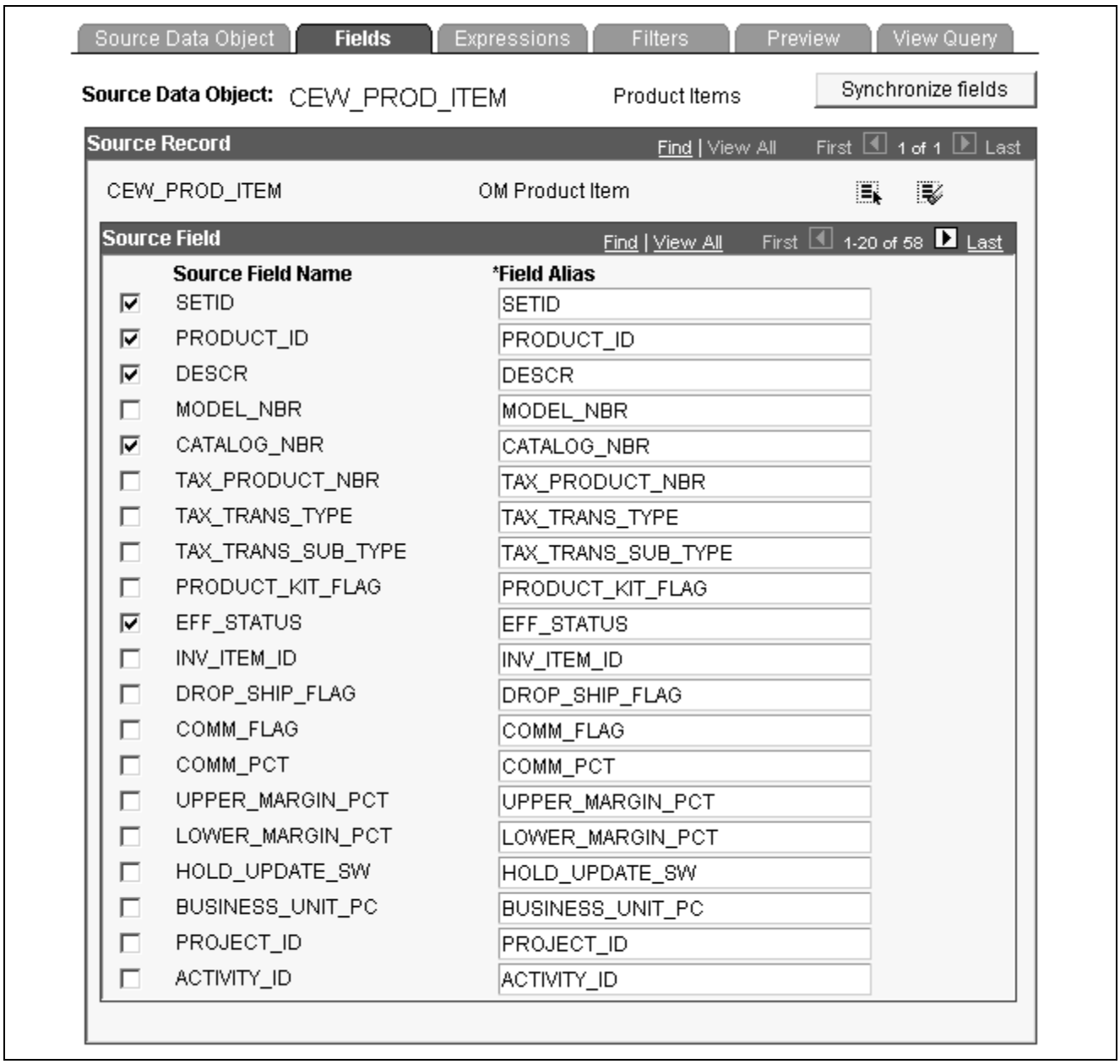
Use this function to create a new source data object that will only slightly differ from the original object. Once saved, you can make the necessary changes to the new object. The new object is maintained separately.

### See Also

Chapter 2, “Setting Up Core PeopleSoft Data Transformer Features,” Defining Subject Areas, page 7

## Specifying Source Data Object Fields

Access the Fields page.




Fields page

The source field information is populated from the source records that you selected on the Source Data Object page. The selected fields become the select list in the extract SQL.

Click the Select All icon to select all of the fields that are listed.

Click the Clear All icon to clear all of the field selections.

**Source Field Name** Select the fields to include in the source data object.

**Note.** At least one field must be selected. Use the Select All and Deselect all icons to make the field selection more efficient.

**Field Alias** Change the field alias of any of the selected field names, if needed.

The field alias is displayed when defining the map, so descriptive names are important.

**Note.** All fields in the source data object must have an alias, and each alias must be unique within the source data object.

**Synchronize Fields** Click to synchronize fields with the database record. It is possible over the life span of a source data object that customizations are made. If a field is added or removed from the physical table, the field list must be synchronized.

### See Also

Chapter 5, “Creating Maps,” Creating Map Definitions, page 45

## Previewing Results

Access the Preview page.

Click the Preview button to view a subset of the source data object based on the record and fields that are selected.

Use this feature to check the validity of the defined source data object. It is especially helpful in determining if your expressions are defined correctly.

**Note.** Attempting to preview complex data sources can quickly consume processing and memory resources on your application server.

The preview maximum row count is set using the Data Transformer Installation Options page. Large row counts take more time and resources to preview. Consider setting your preview row count relatively low.

If no data is returned, verify the SQL that it being used to extract the data is accurate.

### See Also

Chapter 2, “Setting Up Core PeopleSoft Data Transformer Features,” Defining Installation Options, page 6

## Previewing SQL

Access the View Query page.

Click the Generate SQL button to generate SQL text in the Query text box.

Use this to preview the SQL generated by the defined source data object.

**Note.** The enterprise administrator can verify if the extract SQL is correct and adjust the source data object definition as necessary.

# (Optional) Creating Expressions

This section provides an overview of expressions and discusses how to create expression statements.

## Understanding Expressions

Expressions enable you to create virtual columns that are made up of mathematical calculations based on actual fields in a record. Expressions are resolved at runtime so that duplicate information is not stored in the database. Expressions can be numeric, string, date, time, or datetime. Numeric expressions can combine any number of fields, constant values, and math operators, and results are rounded based on the decimal position that is selected. String expressions can be concatenations of any number of character fields and constant values.

### Built-in Functions

PeopleSoft delivers built-in functions that you can use to make expressions powerful and flexible. You can also nest built-in functions and expressions; for example:

- Concatenate two fields, separate them with a comma, drop trailing blanks, and limit this field to 40 characters:

  Substring(RTRIM(FirstName) | , | RTRIM(LastName),1,40)

- Sum the multiplication of two fields:

  SUM(PROD_COST * PROD_RATE)

This table lists all of the delivered built-in functions with supported meta-SQL and aggregate functions:

| Function | Explanation | Use |
|---|---|---|
| ABS(Number) | Returns the absolute value of the specified number. | ABS(-5) returns 5. |
| AddMonth(Date, Number) | Adds a number of months to the specified date and returns the calculated date. | AddMonth(“2002–01–10”,2) returns 2002–03–10. |
| Average (Number) | Returns the average value of the specified number (typically a numeric column name). | Average(PRICE) returns the average price of your source data set. |
| Beginning of Month (Date) | Returns a date representing the first day of the month for the specified date. | Beginning of Month(“2002–10–05”) returns 2002–10–01. |

| Function | Explanation | Use |
|---|---|---|
| Beginning of Year (Date) | Returns a date representing the first day of the year for the specified date. | Beginning of Month(“2002–10–05”) returns 2002–01–01. |
| Count (col) | Returns the number of rows that are found. | Count(PRODUCT_ID) returns the number of rows on your source data set. |
| DateAdd(Date, Days) | Adds a number of days to the specified date and returns the calculated date. | DateAdd(“2002–02–02”,5) returns 2002–02–07. |
| DateDiff(Date, Date) | Returns the number of days that have elapsed between the first and second specified dates. | DateDiff (“2002–02–02”,”2002–02–10”) returns 8. |
| DtTmDiff(Datetime,Datetime) | Returns the number of minutes that have elapsed between the first and second specified datetimes. | DtTmDiff(”’2002-01-01 00:00:00.000”,”2002-01-01 10:00:00.000”) returns 600 (10 hours in minutes). |
| DIFF_H(Datetime, Datetime) | Returns the number of hours that have elapsed between the first and second specified datetimes. | DIFF_H(”’2002-01-01 00:00: 00.000”,”2002-01-01 10:00:00.000”) returns 10. |
| DIFF_S(Datetime, Datetime) | Returns the number of seconds that have elapsed between the first and second specified datetimes. | DIFF_S(”’2002-01-01 00:00: 00.000”,”2002-01-01 10:00:00.000”) returns 36000 (10 hours in seconds). |
| End of Month (Date) | Returns a date representing the last day of the month for the specified date. | End of Month(“2002–10–05”) returns 2002–10–31. |
| End of Year (Date) | Returns a date representing the last day of the year for the specified date. | End of Year(“2002–10–05”) returns 2002–12–31. |
| GetDay(Date) | Returns the day of the month for the specified date. | GetDay(“2002–10–05”) returns 5. |
| GetMonth(Date) | Returns the month of the specified date. | GetMonth(“2002–10–05”) returns 10. |

| Function | Explanation | Use |
|---|---|---|
| GetYear(Date) | Returns the year of the specified date. | GetYear(“2002–10–05”) returns 2002. |
| MOD(Number, Number) | Returns the modulus (or remainder) of the first number when it is divided by the second number. | MOD(14,3) returns 2 (14 divides into 3 four times with a remainder of 2). |
| Max (Number) | Returns the maximum value of the specified number (typically a numeric column name). | Max(PRICE) returns the largest price of your source data set. |
| Min (Number) | Returns the minimum value of the specified number (typically a numeric column name). | Min(PRICE) returns the smallest price of your source data set. |
| Sum (Number) | Returns the sum of the specified number (typically a numeric column name). | Sum(PRICE) returns the sum of all prices of your source data set. |
| RTRIM(String) | Returns the specified string, and trims trailing blank characters. | RTRIM(“Hello “) returns Hello. |
| Round (Number, Factor) | Returns a number representing the specified number after being rounded to the given factor or precision. | Round(5.582, 1) returns 5.6<br>Round(5.512, 0) returns 6 |
| Substring(String, StartPos, Length) | Returns a section of the specified string starting at the specified position and continuing for the specified length. | Substring(“My String Expression“, 4,6) returns String. |
| TO_CHAR(Number) | Returns a string representation of the specified numeric expression. | TO_CHAR(59) returns 59. |
| TO_NUM(String) | Returns a numeric representation of the specified string expression. | TO_NUM(“59”) returns 59.<br>**Note.** Trying to apply a TO_NUM built-in function on a character that does not translate to a numeric value aborts the processing of your map. |

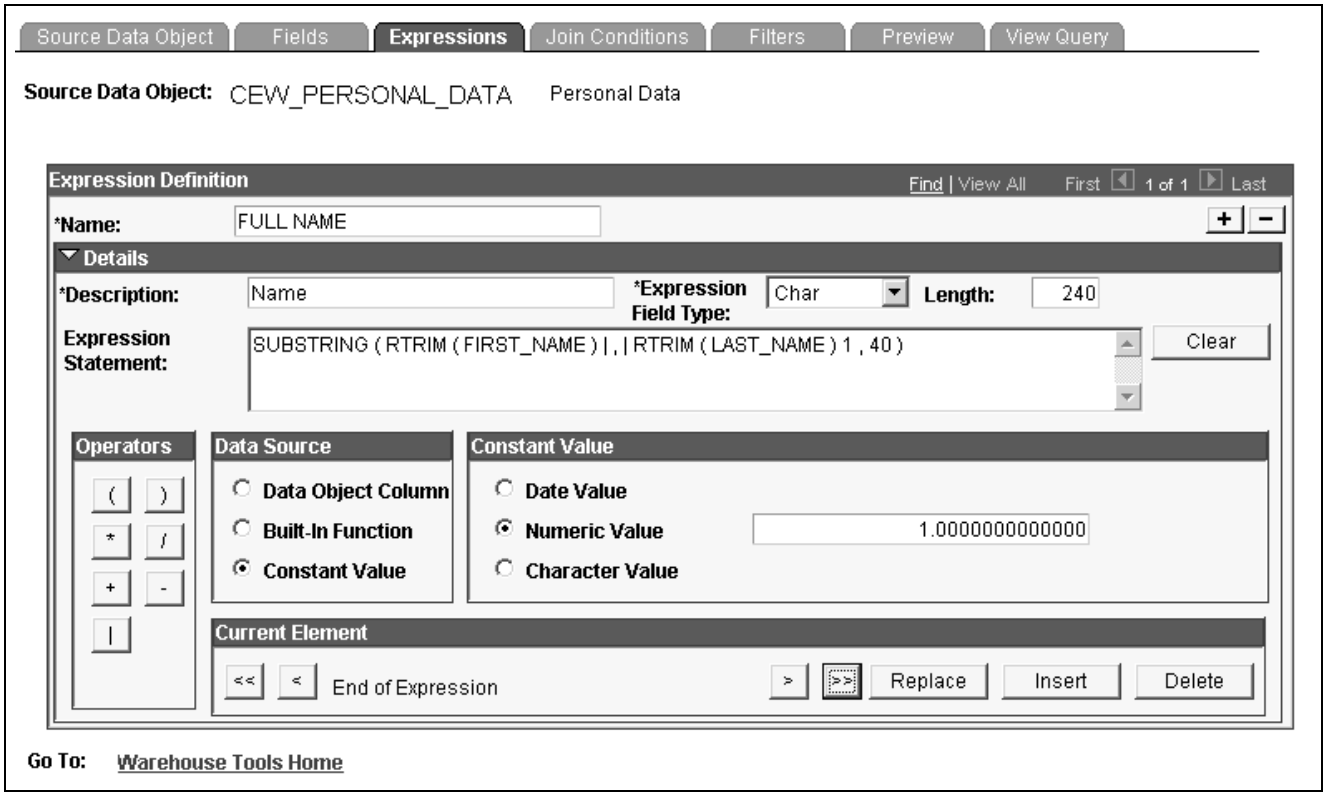
| Function | Explanation | Use |
|---|---|---|
| TrimSubStr (String, Start, Length) | Returns a section of the specified string starting at the specified position and continuing for the specified length, and trims trailing blank characters. | Substring(“My String Expression“, 4,7) returns String. |
| Truncate(Number, Factor) | Returns a number representing the specified number after being truncated to the given factor or precision. | Truncate(5.582, 1) returns 5.5.<br>Truncate(5.512, 0) returns 5. |
| UPPER(String) | Returns the specified string in uppercase characters. | UPPER(“My String Expression“, 4,7) returns MY STRING EXPRESSION. |
| YYMMDD(Date) | Returns the string representation of a specified date in YYMMDD format. | YYMMDD(“2002–10–01”) returns 021001. |

## Page Used to Create Expressions

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Expressions | EOEW_SRCFIELDEXPR | Enterprise Components, Warehouse Tools, Warehouse Tools Homepage, Source Data Object, Source Data Object, Expressions | Create expression statements by selecting operators, fields, and constant values. |

## Creating Expression Statements

Access the Expressions page.




Expressions page

**Name** Enter a unique name for this expression.

**Expression Field Type** Select to control the set of operators, record fields, and value objects that can be selected when building the expression.

*Numeric:* Select to combine any number of record fields, value objects, and math operators.

*String:* Select to concatenate any number of character record fields and value objects.

*Date:* Select to define a constant value or to create a date field from the source data object or built-in functions.

**Expression Statement** Displays your expression as you build it. You cannot type directly into this edit box. Use operators, data source options, and the constant values to create your expressions.

You can see what element is being specified by the arrows surrounding it; the selection is also displayed in the Current Element group box.

**Clear** Click to delete all entries in the Expression Statement edit box.

**Operators** Select from the operator buttons to add operators to the expression.

## Data Source

**Data Object Column** Select this option to display a list of data object fields. Select a field and click Insert to have the selected data object appear in the expression statement.

**Built-in Function**

Select this option to display a list of built-in functions. Select a function and click Insert to have the selected built-in function appear in the expression statement.

Built-in functions let you define numeric calculations like Sum, Average, or End of Month, and Minimum/Maximum values.

**Note.** All parameters of the selected built-in function must be defined.

**Constant Value**

Select this option to enter your own character, numeric, or date value. Click Insert to have the value appear in the expression statement.

**Note.** Consider how an expression will be used when you want to specify date related value objects. If the expression will be in a WHERE clause, then use the %CurrentDateIn value object. If the expression will be in a SELECT clause, then use the %CurrentDateOut value object.

## Current Element

Click to move through the expression statement and identify the text you want to replace or delete or to move to the position in the statement where you want to insert text.

Click the Previous or Next button to move one element forward or backward. Click the First or Last button to move to the beginning or end of the expression statement.

**Note.** The element name will be shown in the Current Element group box as well as surrounded by arrows in the Expression Statement edit box.

**Replace**

Click to replace the current element item in the expression statement with the selected data source.

**Insert**

Click to insert the selected data source into the expression statement before the current element item.

**Delete**

Click to delete the current element item in the expression statement.

## Example: Creating Expressions by Using Data Object Column

This section provides an example of creating an expression by using a data object column.

The company wants to award its employees with a bonus of $1000 for each year that they have been employed by the company. To calculate the bonus:

1. Enter *BONUS* for the expression name, and then enter a description.
2. Select the *Number* expression type.
3. Select integer and decimal positions.
4. Select Data Object Column in the Data Source group box.
5. Select the *YEARS_OF_EMP* data object column, and click Insert.

The field appears in the Expression Statement edit box.

6. Click the Multiplication (*) operator to insert it at the end of the expression statement.
7. Select Constant Value in the Data Source group box.
8. Enter a numeric value of *1000* , and click Insert.

   This creates the following expression statement:

   YEARS_OF_EMP * 1000
9. Click Save.

### Example: Creating Expressions Using Built-in Functions

This section provides an example of creating an expression by using a built-in function.

You want to define a field called SHORT_DESCR that uses the first 10 characters of the DESCR field.

To define the SHORT_DESCR field:

1. Enter *SHORT_DESCR* for the expression name, and then enter a description.
2. Select the *Char* expression type.
3. Enter the length.
4. Select Built-in Function in the Data Source group box.
5. Select the *Substring (String,Start,Length)* built-in function, and click Insert.

   The function appears as *SUBSTRING ( PARAM1 , PARAM2 , PARAM3 )* in the Expression Statement edit box.
6. Use the arrow buttons to navigate through the expression statement and identify the PARAM1 element.
7. Select Data Object Column in the Data Source group box.
8. Select *DESCR,* and click Replace.

   The DESCR field appears in place of PARAM1 in the expression statement.
9. Navigate to PARAM2.
10. Select Constant Value in the Data Source group box, and enter a numeric value of *1*.
11. Click Replace.
12. Navigate to *PARAM3,* and replace it with a numeric value of *10.*

    This creates the following expression statement:

    SUBSTRING ( DESCR , 1 , 10 )
13. Click Save.

## (Optional) Creating Filters

This section provides an overview of filters and discusses how to create filters.

## Understanding Filters

Filters serves as criteria that the system applies to each row of data in the data source. If the row passes the criteria, the system uses the data as an input to the data transformer map; if the row doesn't pass, the system doesn't use the data. A filter compares the value in one of the row's fields to a reference value. For example, suppose that you need only products whose selling price is greater than $10.00. You would compare the value in the Price field to the constant value of $10.00. The filter criteria is placed in the WHERE clause in the extract SQL.

The following table describes the operators that you can use to compare values:

| Operator | Description |
|---|---|
| Like | The value in the selected field matches a specified string pattern. The comparison value may be a string that contains wild card characters. The wild card characters that PeopleSoft Data Transformer recognizes are percent (%) and underscore (_).<br><br>The % matches any string of zero or more characters. For example, *C%* matches any string starting with *C*, including *C* alone.<br><br>The _ matches any single character. For example, *_ones* matches any 5-character string ending with *ones*, such as *Jones* or *bones.*<br><br>**Note.** To use one of the wild card characters as a literal character, (that is, to include % in your string), precede the character with a backslash (\). For example, *percent\%*. |
| = | The value in the selected record field exactly matches the comparison value. |
| <> | The value in the selected record field is not equal to the comparison value. |
| > | The value in the record field is greater than the comparison value. |
| <= | The value in the record field is less than or equal to the comparison value. |
| < | The value in the record field is less than the comparison value. |
| >= | The value in the record field is greater than or equal to the comparison value. |

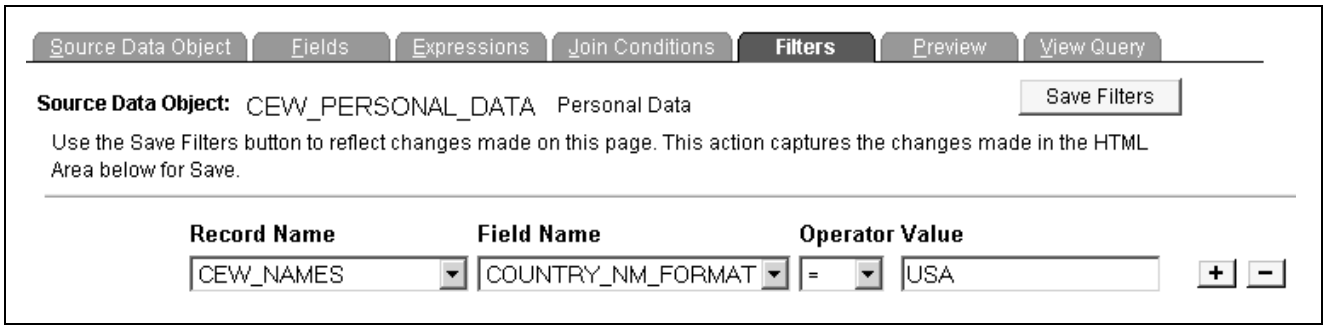
When you include multiple filters, link them using AND or OR. When you link two filters with AND, a row must meet the first *and* second filter to pass the test. When you link with OR, a row must meet the first *or* second filter, but not necessarily both.

## Page Used to Create Filters

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Filters | EOEW_SRCFILTER | Enterprise Components, Warehouse Tools, Warehouse Tools Homepage, Source Data Object, Source Data Object, Filters | Create filters. |

## Creating Filters

Access the Filters page.




Filters page

To define a filter:

1. Select the record that you want to filter against from the list of records that are defined in the source data object.
2. Select the field on which to base your filter.
3. Select an operator.
4. Enter a comparison value.
5. Click Save.
6. Click Refresh Filter to save any changes that you made to existing filters and reflect those changes in the source data object. Refresh Filter also captures changes made for Save and updates dropdown lists to show your selections on the page.

**Note.** If the filter begins to get complicated, use the arrow keys to indent subconditions. Subconditions will be surrounded by parentheses and fully resolved before comparing results with other level results.

# (Optional) Joining Records

This section provides an overview of joins and discusses how to define join conditions.

## Understanding Joins

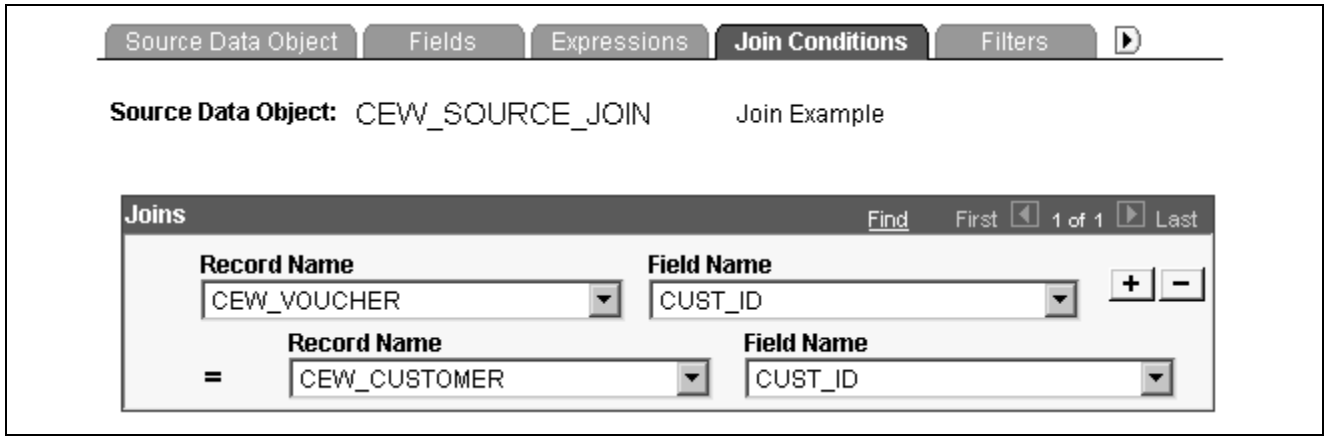
PeopleSoft Data Transformer enables you to create source data objects that include multiple-table joins. Joins retrieve data from more than one table, presenting the data as if it came from one table. PeopleSoft Data Transformer links the tables, based on common record fields, and links the rows on the two tables by common values in the shared record fields.

## Page Used to Join Records

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Join Conditions | EOEW_SRCJOIN | Enterprise Components, Warehouse Tools, Warehouse Tools Homepage, Source Data Object, Source Data Object, Join Conditions | Define join conditions. |

## Defining Join Conditions

Access the Join Conditions page.




Join Conditions page

**Note.** This page appears only when two or more records are defined in the source data object.

Enter the record name and associated field name for the left and right sides of the join.

The content of the field name dropdown list box is filtered to exclude some fields with data types that cannot be qualified (for example, image columns). You need to fully qualify the join criteria of the selected records; otherwise, processing may return unexpected results. The join criteria will become part of the WHERE clause in the extract SQL.

# CHAPTER 4

# Preparing to Create Maps

This chapter provides an overview of the mapping process and discusses how to:

- Set up target field default values.
- Set up translation sets.
- Create transformations by using the Transformation Wizard.
- Use transformation PeopleCode.
- Create map rules.

## Understanding the Mapping Process

Mapping translates values from the source data to the format of the target source by using default target values, transformations, translation sets, and map rules to facilitate the process.

This section discusses:

- Target field default value setup.
- Translation set setup.
- Transformation creation.
- Map rule setup.

### Target Field Default Value Setup

Target field default values allow you to set up values, which can be reused across multiple maps, to map to the target field. This allows having a central location for updating a target field value. For example, the target field default value for EFF_STATUS is set to *A*, and is used in 100 maps. At runtime, A is inserted into the target field for all those maps. If the value for EFF_STATUS is changed to *Active*, the value is updated once and when the 100 maps are run again, the new value will be inserted into the target field. No changes are necessary at the map level.

A default with no value is initialized to a blank, a zero, or the appropriate PeopleSoft null value.

When setting default values, consider the target field data type format:

- Character fields are used for names, codes, and letter values.

  Uppercase converts the field value to uppercase and signifies that no other formatting options apply to the field. Mixed case stores uppercase and lowercase characters as entered.

- Number fields and signed number fields are fixed in field length and allow the entry of positive numbers.

  Only signed numbers allow the entry of negative numbers.
- Date fields contain calendar dates.

  A date field has a field length of 10 characters and is maintained by the system.

  The default format of a date field is defined by the database and can be overridden by your browser settings.

The following table discusses data type format considerations:

| Source Field | Target Field | Required Considerations | User Warning |
|---|---|---|---|
| Date | Date | | |
| Date | DateTime | | |
| Char | Char | Truncation occurs as needed. | |
| Char | Number | Data must be numeric in the character source field. | Appears when the character field is greater than the number in bytes. |
| Number | Number | | Appears when the numeric field is smaller in integer positions, decimals, or if the source is signed and the target is not. |
| Number | Char | Character must be big enough. | |
| DateTime | Date | | |
| DateTime | DateTime | | |
| Time | Time | | |
| Long | Long | | |

**Note.** The default value assigned must match the target field format or an error occurs at runtime. For example, you cannot assign a value of *7A* to a numeric field. Specific error messages display during the save if a datatype conversion error occurs.

## Translation Set Setup

Use translation sets to define equivalent values or a code set for data conversion. For example: *EA* equals *Each, GAL* equals *Gallon,* and *IN* equals *Inch.* Translation sets make the data values consistent.

## Transformation Creation

When data is copied from the source to the target, the data can be transformed by using edits, look-ups, or PeopleCode. Transformations enable you to change a column's value. The Transformation Wizard guides you through the process of creating transformations.

## Map Rule Setup

You can create rules to be used by the AutoMapper feature in the map field detail definition where it attempts to match source fields with target fields. Use rules to assign correct default values to target fields when creating maps. By using map rules, you can assign a literal default, transformation, source field, or a translation set to a target field. If the map rule is required, you cannot override the rule when you define map field details.

### See Also

Chapter 5, "Creating Maps," Defining Map Field Details, page 48

# Setting Up Target Field Default Values

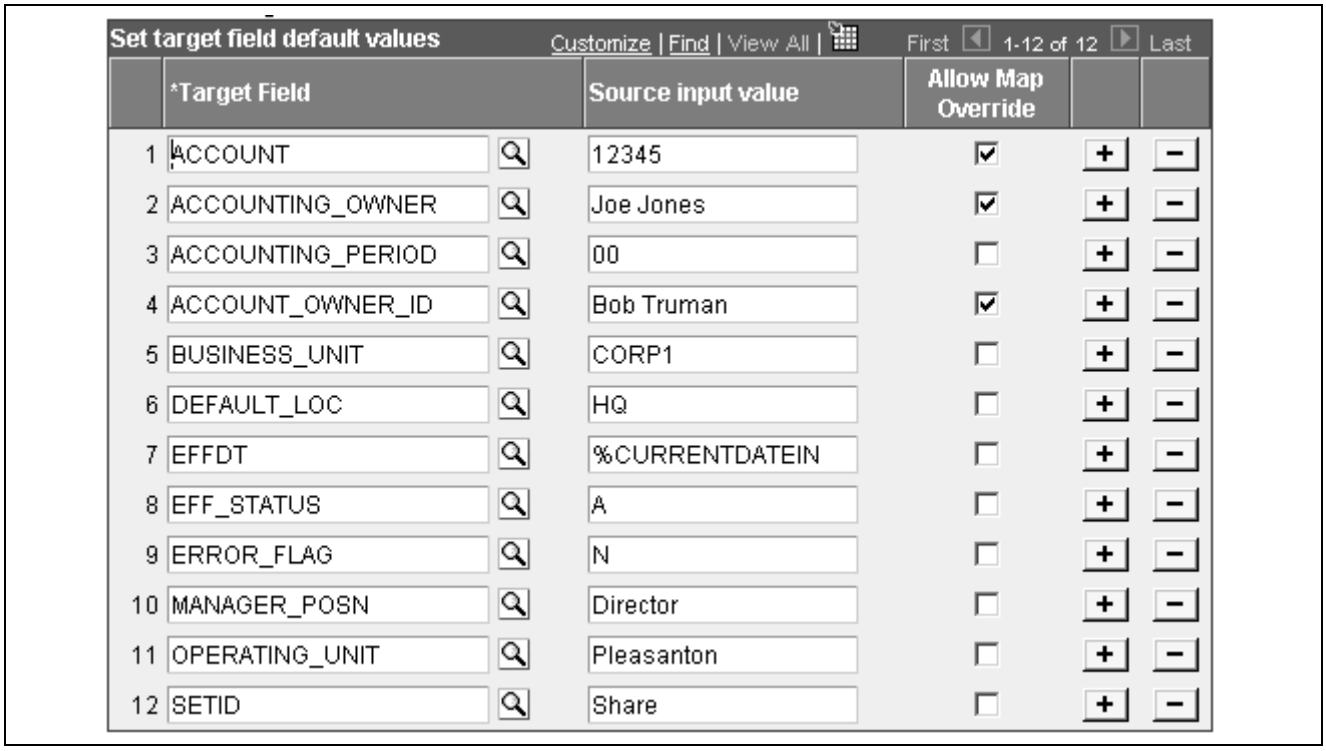
This section discusses how to set up target field default values.

## Page Used to Set Up Target Field Default Values

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Set Target Field Default | EOEW_SET_DFLT_RUL | • Enterprise Components, Warehouse Tools, Set Target Field Default<br>• Enterprise Components, Warehouse Tools, Map Definition, Map Field Detail<br>Click the Default link on the Map Field Detail page. | Set target field default values that are used in the map field detail definition. |

## Setting Up Target Field Default Values

Access the Set Target Field Default page.




Set Target Field Default page

**Target Field** Select the target field for which you want to define defaults.

**Source input value** Enter the default value for the associated target field.

**Note.** This field is free text, so you must consider the target field data type format.

**Allow Map Override** Select to allow the field value to be overridden at the map level, otherwise the row will be protected.

# Setting Up Translation Sets

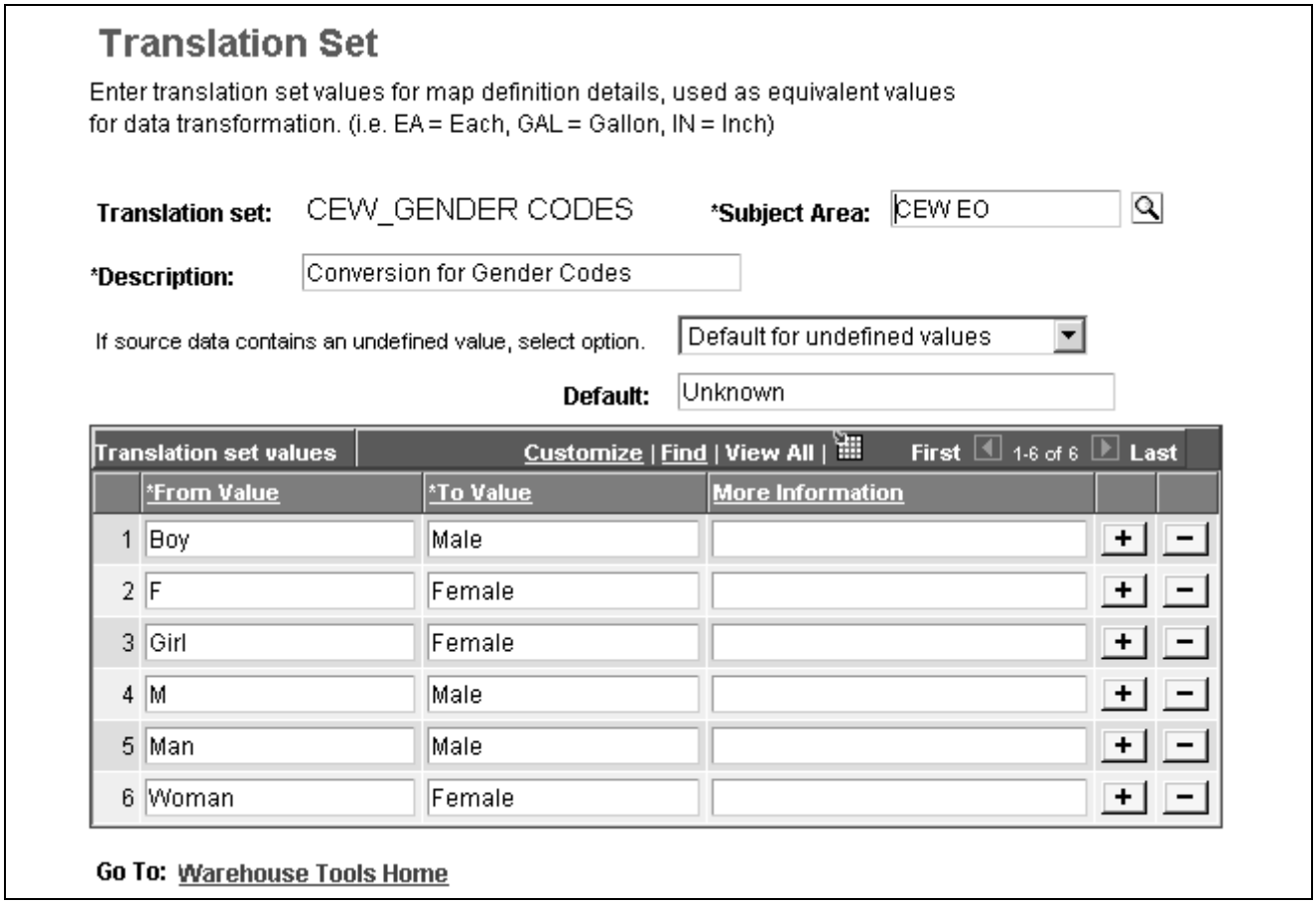
This section discusses how to set up translation sets.

## Page Used to Set Up Translation Sets

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Translation Set | EOEW_CODE_TBL | • Enterprise Components, Warehouse Tools, Translation Set<br>• Enterprise Components, Warehouse Tools, Map Definition, Map Field Detail<br>Click the Translation link on the Map Field Detail page.<br>• Enterprise Components, Warehouse Tools, Map Definition, Map Field Detail<br>Click the Add link on the Map Field Detail page. | Enter translation set values for map definition details. |

## Setting Up Translation Sets

Access the Translation Set page.




Translation Set page

**Subject Area** Select a subject area.

For new translation sets, the subject area will be set to the default as defined on the Subject Area page.

**If source data contains an undefined value, select option** Select how to handle undefined values:

- *Default for undefined values:* Rows that contain undefined source values have the defined default value inserted into the target field and then loaded in the target.
- *Do not load undefined values:* Rows that contain undefined source values will not be loaded into the target. Error handling options determine actions on these invalid rows.
- *Retain undefined data values:* Rows that contain undefined source values are retained and loaded in the target.

## Translation Set Values

Enter the from and to values for each value that you want translated. If needed, enter the rationale for your selections in the More Information field.

### See Also

Chapter 2, “Setting Up Core PeopleSoft Data Transformer Features,” Defining Subject Areas, page 7

# Creating Transformations by Using the Transformation Wizard

This section provides an overview of the Transformation Wizard, lists common elements, and discuss how to:

- Create transformation definitions.
- Define edit, look-ups or PeopleCode transformations.
- Create message definitions.
- (Optional) Set up source input values.
- (Optional) Define output properties.

## Understanding the Transformation Wizard

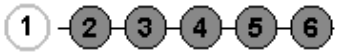
Transformations are created differently based on the transformation type that you select on the definition page. The Transformation Wizard is a tool that guides you step-by-step through the process of creating transformations based on transformation type. The wizard enables you to navigate back and forth through only those pages that are necessary to create the transformation type that you select.

**Note.** Transformations occur after data has been extracted from your source.

The Transformation Wizard is comprised of up to six steps. The following table lists the steps that are necessary to complete look-up, edit, and PeopleCode transformations:

| | Look-Up | Edit | PeopleCode |
|---|---|---|---|
| Create a transformation definition. | Yes | Yes | Yes |
| Define look-ups. | Yes | No | No |
| Create a message definition. | Yes | Yes | No |
| Enter comments. | Yes | Yes | Yes |
| (Optional) Set up source input values. | Yes | Yes | No |
| (Optional) Define output properties. | Yes | No | No |

## Common Element Used in This Section




The Transformation Wizard navigation tool displays the number of pages that are necessary to create the transformation, and it highlights the current page.

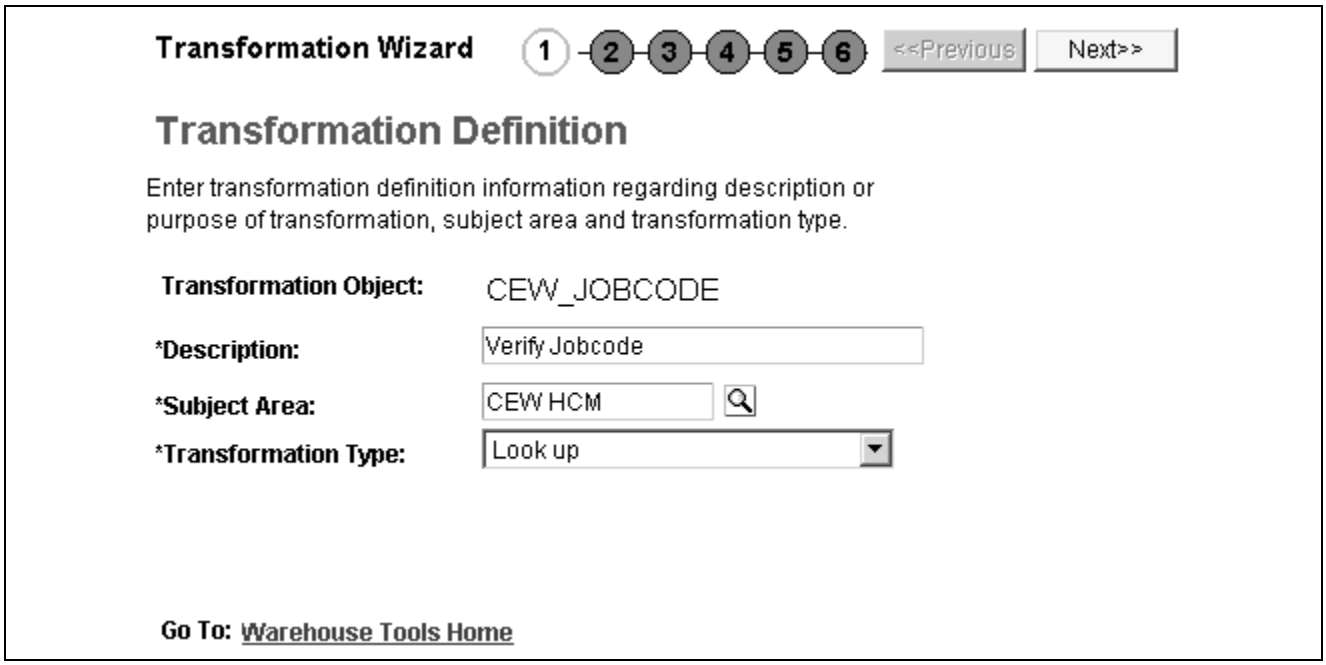
Click a page number to navigate to that page or click the Next and Previous buttons to navigate between pages.

# Pages Used to Navigate Transformation Wizard

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Transformation Wizard - Transformation Definition | EOEW_TRN_DFN_INFO | Enterprise Components, Warehouse Tools, Transformation Definition | Enter transformation definition information |
| Transformation Wizard - Look Ups | EOEW_TRN_DFN_LU | • Click the Next button on the Transformation Wizard - Transformation Definition page.<br>• Click the Transformation Wizard - Look Ups page number on the Transformation Wizard navigation tool. | Enter a join condition to establish a relationship between this transformation and the look-up definition. |
| Transformation Wizard - Message Definition | EOEW_TRN_DFN_EDIT | • Click the Next button on the Transformation Wizard - Look Ups page.<br>• Click the Transformation Wizard - Message Definition page number on the Transformation Wizard navigation tool. | Select the message definition to use for edit processing. |
| Transformation Wizard - Comments | EOEW_TRN_DFN_COM | • Click the Next button on the Transformation Wizard - Message Definition page.<br>• Click the Transformation Wizard - Comments page number on the Transformation Wizard navigation tool. | Enter addition information about this transformation. |
| Transformation Wizard - Source Input | EOEW_TRN_DFN_SRC | • Click the Next button on the Transformation Wizard - Comments page.<br>• Click the Transformation Wizard - Source Input page number on the Transformation Wizard navigation tool. | Define the source input values for this transformation condition. |
| Transformation Wizard - Output Properties | EOEW_TRN_DFN_LUC | • Click the Next button on the Transformation Wizard - Source Input page.<br>• Click the Transformation Wizard - Output Properties page number on the Transformation Wizard navigation tool. | Enter look-up transformation definition properties. |

# Creating Transformation Definitions

Access the Transformation Wizard - Transformation Definition page.




Transformation Wizard - Transformation Definition page

**Transformation Object** Enter a unique object name for the transformation. The system automatically converts the input to uppercase.

For transformation type of PeopleCode, the name of the transformation object is used to reference the proper method in the PeopleCode transformation class. If the transformation object name does not contain a period (.) in its name, the corresponding method must be in the default class called EOEW_ETL_PUB:PeopleCodeTransformation.

To call a class in a proprietary package, use the name of the method in addition to the name of the package and class. For example, if you have created a package called MY_APP_PKG, with a class called MYPC and a method called SET_UNIT_PRICE, the transformation object name is specified as MY_APP_PKG:MYPC.SET_UNIT_PRICE.

---

**Note.** For PeopleCode transformations, the transformation object name must match the name of the Application Class method.

---

---

**Note.** For any custom build PeopleCode transformations, use your own Application package and class name. By not putting the PeopleCode in EOEW_ETL_PUB:PeopleCodeTransformation, the code will not be affected during an upgrade.

---

**Subject Area** Select a subject area.

For new transformations, the default subject is defined on the Subject Area page.

**Transformation Type**

*Look up.* Performs a look up against an intermediate table and returns a value. If the value does not exist, an error can be logged. An option is also available to default a value into the target field on error conditions.

*Edit.* Performs edits against the entire source dataset. An edit is applied at a map level, not at a target field level.

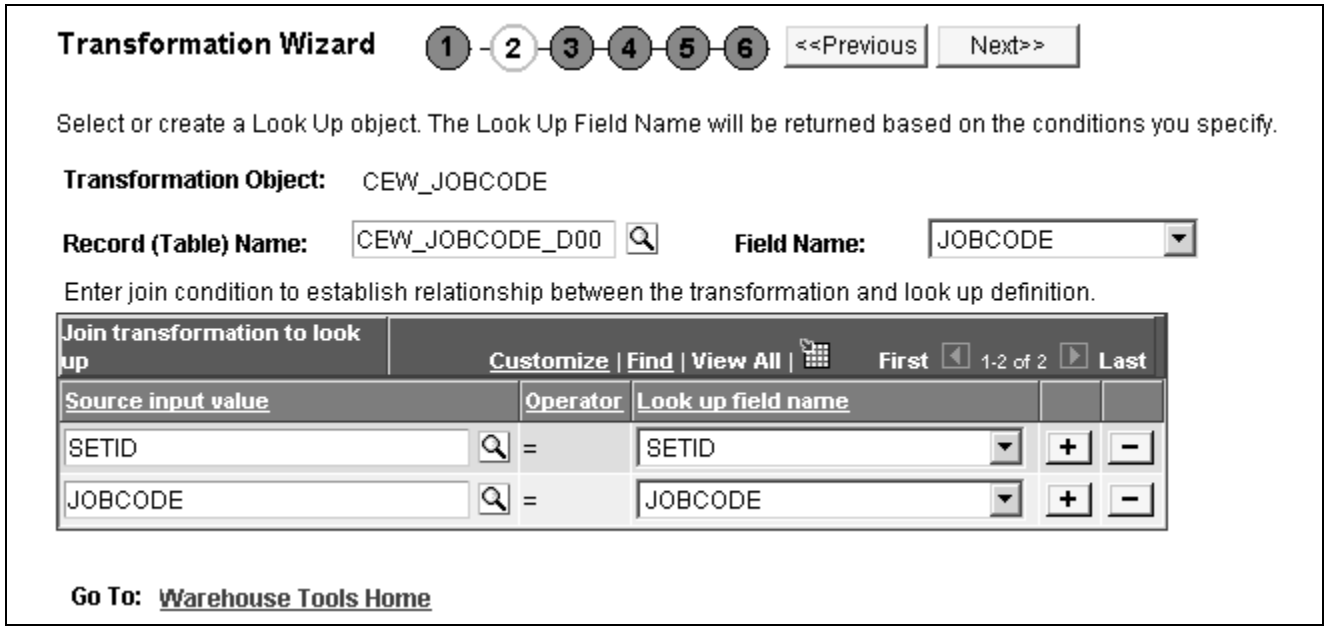
*PeopleCode.* Allows for a PeopleCode object reference. A PeopleCode Application Class method can be created to execute code for transformations that cannot be built with the available interfaces.

### See Also

Chapter 2, "Setting Up Core PeopleSoft Data Transformer Features," Defining Subject Areas, page 7

## Defining Look-Ups

Access the Transformation Wizard - Look Ups (EOEW_TRN_DFN_LU) page.




Transformation Wizard - Look Ups page

**Record (Table) Name**

Select a record for the intermediary look-up table.

**Note.** This table must exist in the local PeopleSoft database.

**Field Name**

Select the value to be returned from the transformation and inserted into the target field. The available values are based on the record name that you selected.

### Join Transformation to Look Up

**Source input value**

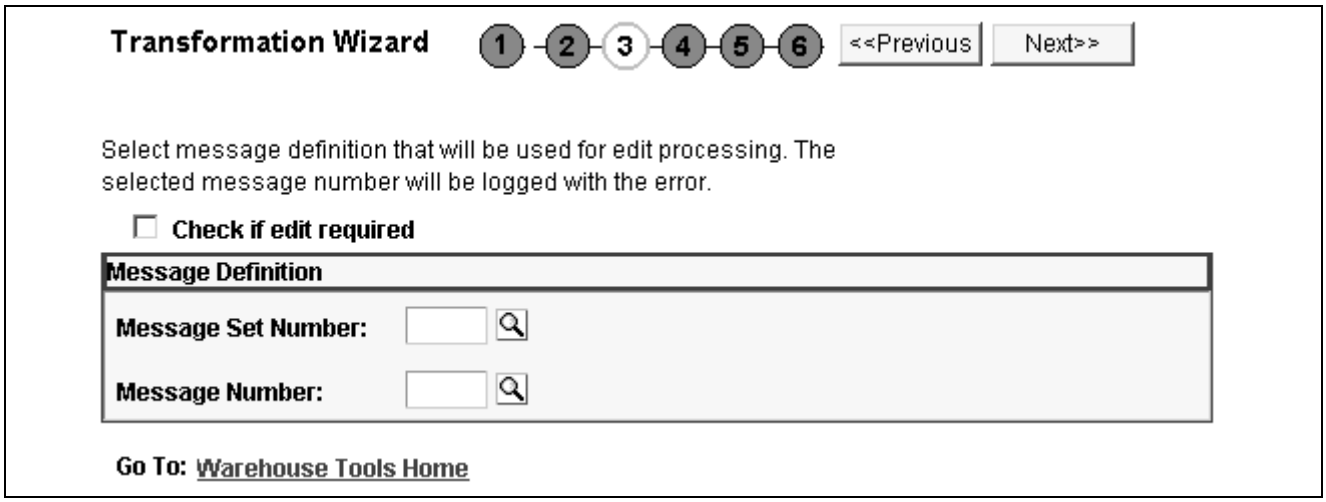
Select the source fields that are required for the join.

**Look up field name**

Associate a look-up field name value with a source input value to complete the join condition.

## Creating Message Definitions

Access the Transformation Wizard - Message Definition (EOEW_TRN_DFN_EDIT) page.



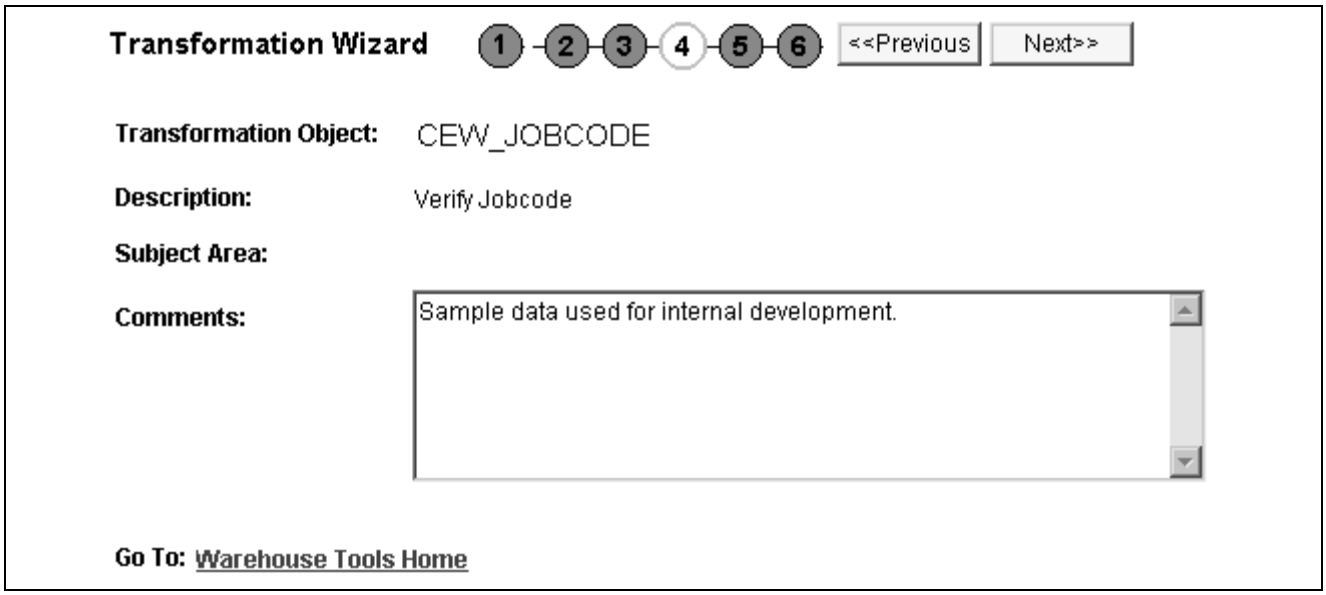

Transformation Wizard - Message Definition page

**Check if edit required** Select if you require an edit to be performed with transformation errors. If this checkbox is cleared, the edit will still execute at run-time but the results will not be available.

**Message Set Number** and **Message Number** Select a message set number and a message number to be logged with any transformation errors.

## Entering Comments

Access the Transformation Wizard - Comments (EOEW_TRN_DFN_COM) page.

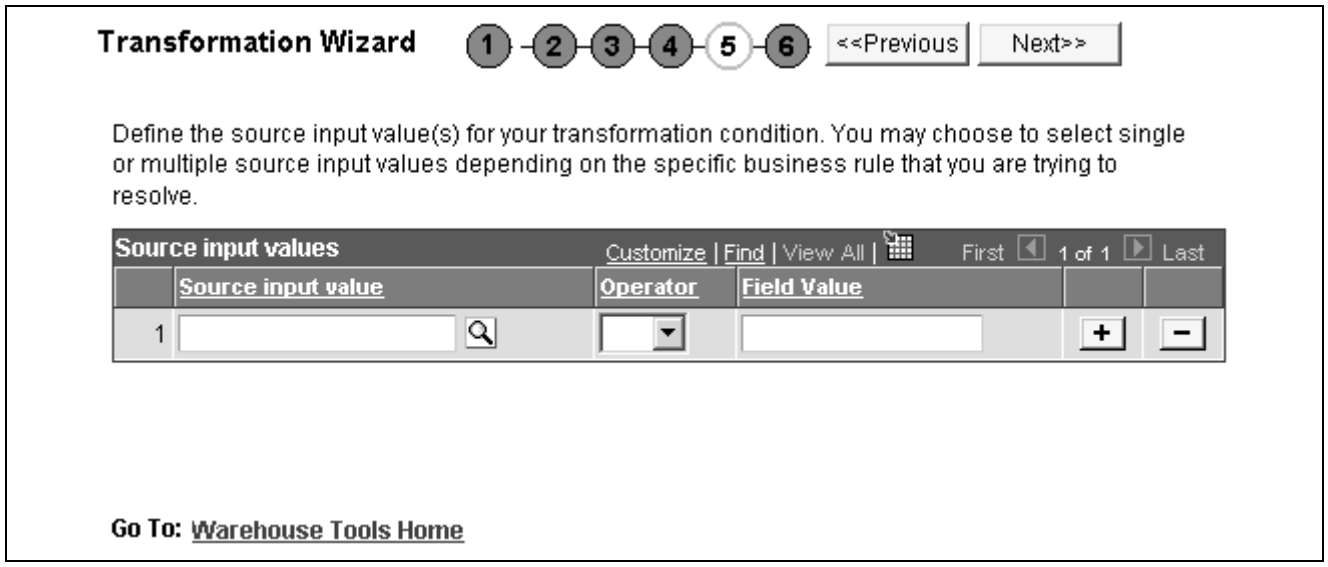



Transformation Wizard - Comments page

Use the Comments field to enter commentary specific to this transformation. Try to thoroughly describe this edit to help others reuse it.

## (Optional) Setting Up Source Input Values

Access the Transformation Wizard - Source Input (EOEW_TRN_DFN_SRC) page.

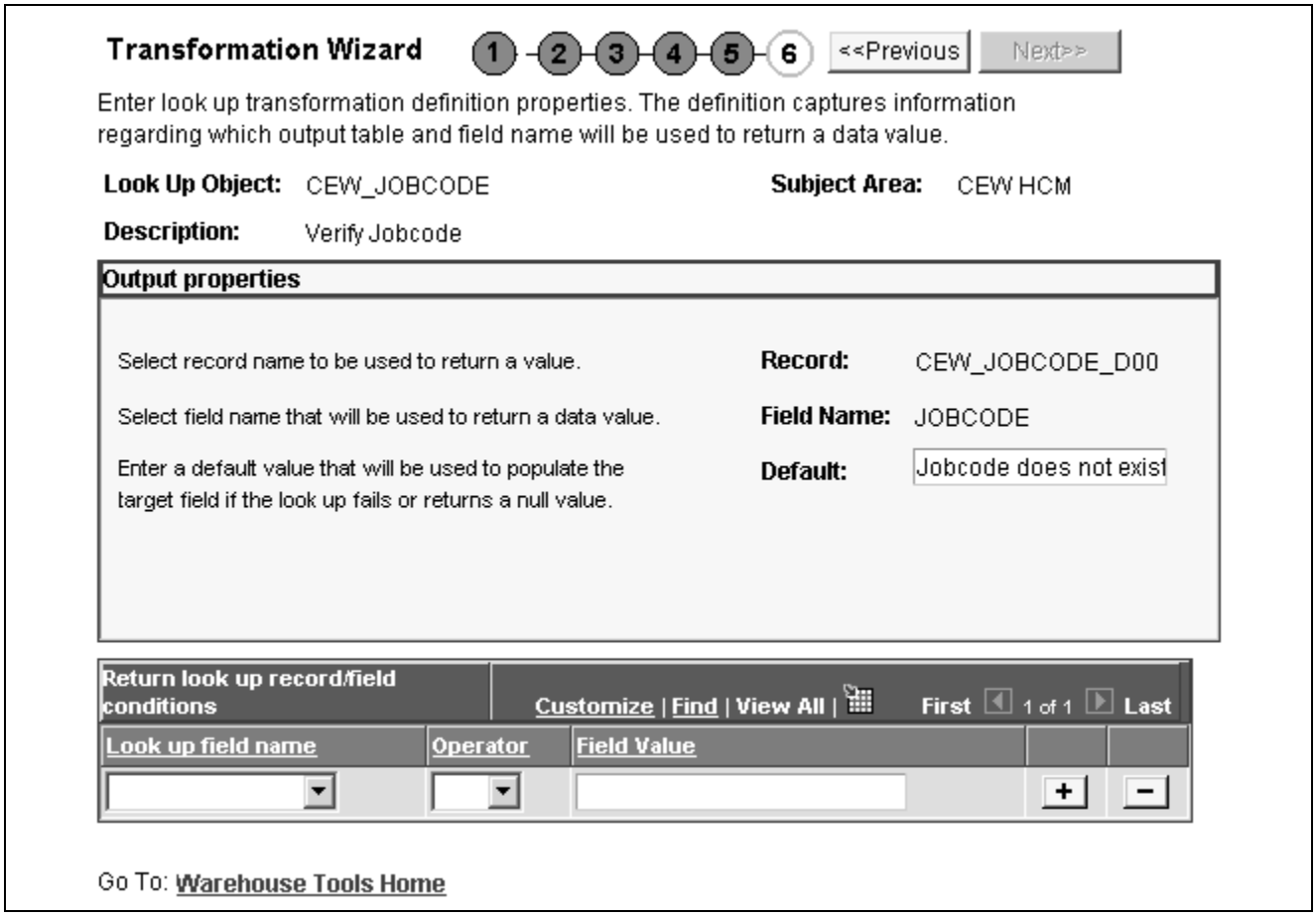



Transformation Wizard - Source Input page

Use source input values to further qualify the source data that is used for this transformation. You can enter additional criteria to restrict the rows of the source data that are used in the join to the look-up table.

## (Optional) Defining Output Properties

Access the Transformation Wizard - Output Properties (EOEW_TRN_DFN_LUC) page.




Transformation Wizard - Output Properties page

**Record** and **Field** Displays the record and field to be used to return a value.

**Default** Enter the value for the target field if the look-up fails or returns a null value.

### Return Look Up Record Field Conditions Grid

The look-up condition further qualifies the look-up table data that is used for this transformation. You can enter additional criteria to restrict the rows of the look-up table that are used in the join to the look-up table. The target field is populated based on the look-up values that are provided.

## Using Transformation PeopleCode

This section provides sample code delivered with your PeopleSoft product and discusses how to use transformation PeopleCode.

**Note.** If you need to create your own package and class, ensure that they adhere to the same format as shown here.

The FUNCLIB object must be imported and your methods must take this object as its only parameter. The HashTable class is a utility providing some of the internal information that you need to code your PeopleCode transformation. PeopleSoft Data Transformer creates a temporary table at runtime to store the fields from your source data object and from which you can access your PeopleCode transformation. In addition, the name of this temporary table is dynamically assigned and cannot be hard-coded into your program. For these reasons, PeopleSoft delivers helper methods for you to access and modify the content of your data:

- GetSourceFieldList() method returns a HashTable object containing a name-value pair for accessing your Source Data Object fields.
- GetTransformFieldList() method returns a HashTable object containing a name-value pair for accessing target fields that have transformations associated with them.
- GetTempTableName() returns the name of the temporary table that is used by PeopleSoft Data Transformer.

### Sample PeopleCode Transformation

The following example updates the EOEC_CCI_UNITPRICE field on the target with a value of the source data object PROD_PRICE field plus a constant of 100, by issuing an UPDATE statement on the PeopleSoft Data Transformer temporary table.

Because the target field, EOEC_CCI_UNITPRICE, has an associated transformation, the actual name on the temporary table is resolved with a GetValue(EOEC_CCI_UNIT_PRICE) call on the transformation field's hash table. Similarly, the PROD_PRICE source data object field is resolved by making a GetValue(PROD_PRICE) call on the source field's hash table.

```
import EOEW_ETLAPI:COMMON:FUNCLIB;
import EOEW_ETLAPI:COMMON:HashTable;

class PeopleCodeTransformation
   method SET_UNIT_PRICE(&COMM As FUNCLIB);
   method MY_OTHER_PCODE_TRANS(&COMM As FUNCLIB);
end-class;

method SET_UNIT_PRICE
   /+ &COMM as EOEW_ETLAPI:COMMON:FUNCLIB +/
   Local HashTable &SDOFields, &TranFields;
   Local string &SQLStatement;

   /* Retrieve the hashtable containing ALIASNAME->TEMPFIELDNAME
    value pair */
   &SDOFields = &COMM.GetSourceFieldList();
   &TranFields = &COMM.GetTransformFieldList();

   /* Update the EOEW_CCI_UNITPRICE to: SDO.PROD_PRICE + SomeNumber
       This would resolve into something like:
 UPDATE ETL_TEMP_TBL SET ETL_TEMP_1 = EOEW_FP_N3_0 + 100
   */
   &SQLStatement = "UPDATE " | &COMM.GetTempTableName() | " SET " |
  &TranFields.GetValue("EOEC_CCI_UNITPRICE") | " = " |
  &SDOFields.GetValue("PROD_PRICE") | " + 100";
```

```
   SQLExec(&SQLStatement);
end-method;

method MY_OTHER_PCODE_TRANS
     .
 .
 .
end-method;
```

# Creating Map Rules

This section provides an overview of map rules and discusses how to define map rules.

## Understanding Map Rules

AutoMapper uses the rules that you create in the map field detail definition. Rules may be based on the subject area, the source, the target, or any combination, depending on the business rule being applied. AutoMapper considers only map rules that are defined with a subject area matching the map's subject area or those that are assigned the default enterprise subject area. The rules are made up of transformations, constant default values, translation sets, and field map hints. If the map rule is required, you will not have access to override the rule on the Map Field Detail page.

This order of precedence and conditions applies when you assign different rules to a single target field:

- Source

  The source field must exist on the source data object that is associated with the map. The source field type must be compatible with the target field type.

- Transformation

  The fields that are defined as joins or constraints from the source data object must exist on the source data object that is associated with the map.

- Translation Set

  The fields that are defined as the join to the from value of the translation set must exist on the source data object that is associated with the map.

If no rules were found to match a given target field, processing occurs in this order:

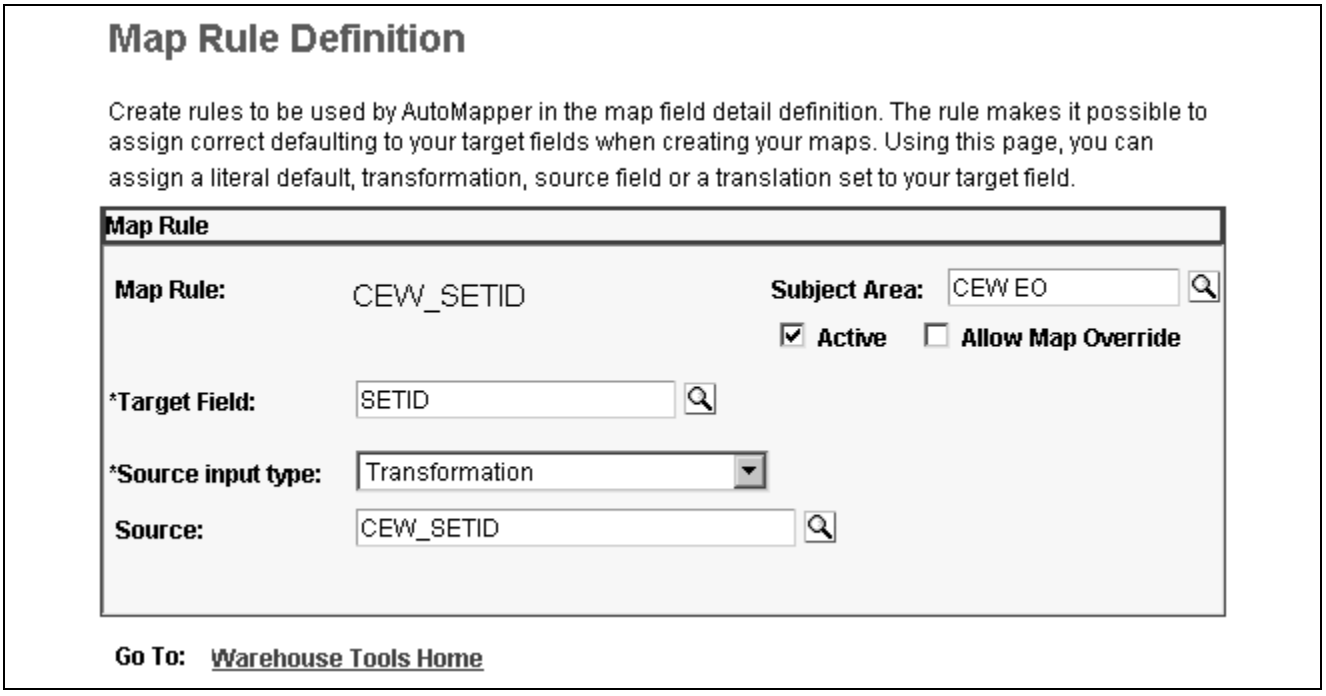
- Exact name match of target field.
- Default value for the target field.
- A zero or NULL is assigned to the field depending on its data type.

## Page Used to Create Map Rules

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Map Rule Definition | EOEW_RULE_DFN | Enterprise Components, Warehouse Tools, Map Rules | Define map rules. |

## Defining Map Rules

Access the Map Rule Definition page.




Map Rule Definition page

**Active** Select to make the rule active. Only active rules get used during an AutoMapper run.

**Allow Map Override** Select to allow the rule to be overridden on the Map Field Detail page.

**Target Field** Select the target field on which to base this rule.

**Subject Area** Select a subject area.

For new rules, the default subject area is defined on the Subject Area page.

**Source input type** *Source:* Select to enable the Source Field Alias field, where you enter an alias for your source field if one is defined. If not, leave this field blank. AutoMapper always maps the alias into the selected target field.

*Transformation:* Select to enable the Source field, where you enter a transformation object. AutoMapper always maps this transformation into the selected target field.

*Translation Set:* Select to enable the Source Field Alias and Source fields, where you enter an alias and translation set. When AutoMapper sees the alias on the source, it always maps this translation set into the selected target field.

# CHAPTER 5

# Creating Maps

This chapter discusses how to create map definitions.

## Creating Map Definitions

This section discusses how to:

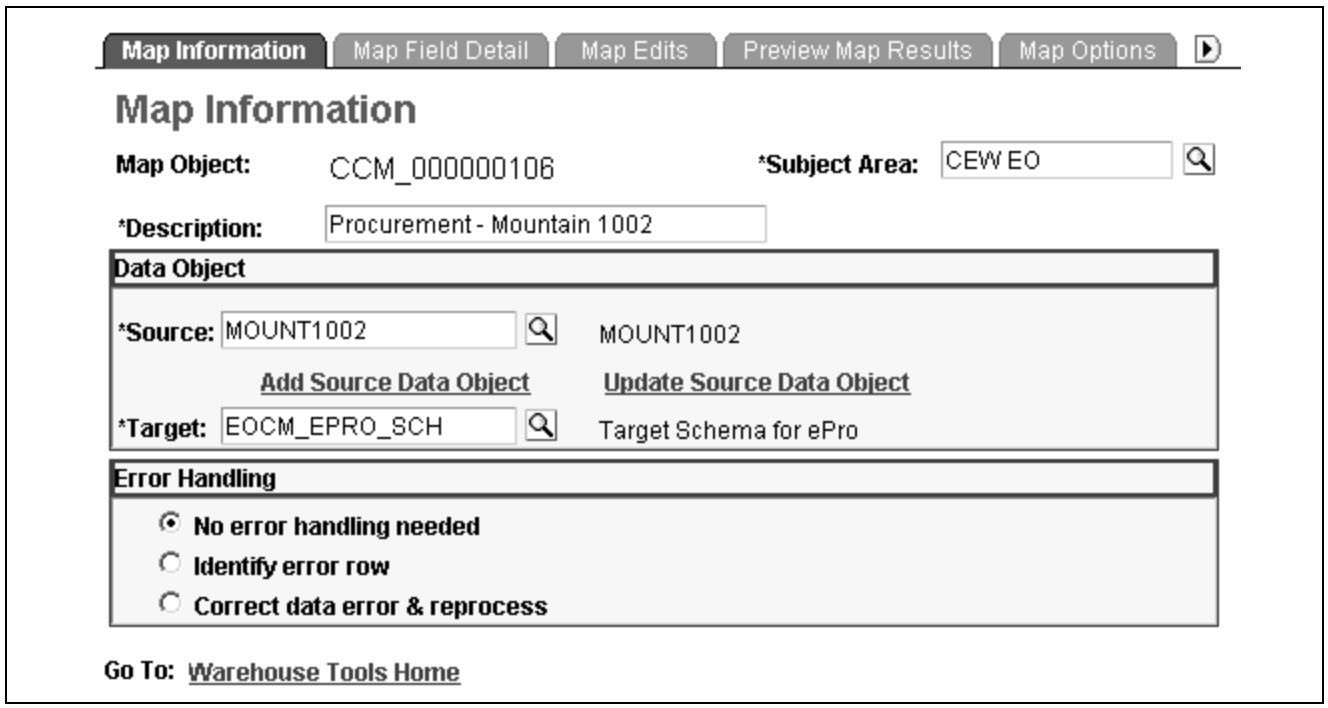
- Define map information
- Define map field details.
- Perform map edits.
- Preview map results.
- Updating map processing options.

## Pages Used to Create Map Definitions

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Map Information | EOEW_MAP_DFN | Enterprise Components, Warehouse Tools, Map Definition, Map Information | Enter general mapping information. |
| Map Field Detail | EOEW_MAP_FLD | Enterprise Components, Warehouse Tools, Map Definition, Map Information, Map Field Detail | Enter field-level mapping details. |
| Map Edits | EOEW_MAP_EDIT | Enterprise Components, Warehouse Tools, Map Definition, Map Information, Map Edits | Edit map source input values that are used in transformations. |
| Preview Map Results | EOEW_TARPREVIEW | Enterprise Components, Warehouse Tools, Map Definition, Map Information, Preview Map Results | View a subset of your data based on the defined map. |
| Map Definition - Comments | EOEW_MAP_COMMENT | Enterprise Components, Warehouse Tools, Map Definition, Map Information, Comments | Enter comments that are related to the map definition. |
| Map Options | EOEW_MAP_OPT | Enterprise Components, Warehouse Tools, Map Definition, Map Information, Map Options | Override or select options at the map level. |

## Defining Map Information

Access the Map Information page.




Map Information page

**Subject Area** Select a subject area.

For new maps, the subject area will be set to the default as defined on the Subject Area page.

**Source** Enter the source data object for this map.

**Note.** The source data object prompt is restricted by subject area. You see only those objects that are in the map definition's current subject area and those in the default subject area.

**Add Source Data Object** Click to navigate to the Source Data Object component and create a new source data object to use as the source.

**Update Source Data Object** Click to navigate to the Source Data Object component and change the source data object that you selected as the source.

**Target** Select the target data object.

This value controls the target fields that are available on the Map Field Details page.

**Error Handling** *No error handling needed:* Select to have the system perform no data validation and insert all rows into the target table.

*Identify error row:* Select to have the system perform data validation and insert both valid and invalid rows into the target table. You must select a target field to contain the error flag on the Map Field Detail page.

**Note.** The error flag will not be available for any other type of mapping.

*Correct data error & reprocess:* Select to have the system perform data validation, insert valid rows into the target table, and insert invalid rows into a user-defined error table. You will be prompted to create an error record on the Map Field Detail page

---

**Note.** The system administrator must build the user-defined error table in PeopleSoft Application Designer before you load the defined map.

The create error record push button will create a record in PeopleSoft metadata that has all of the necessary columns needed at runtime. It must then be build using Application Designer. If your map changes (different transformations, translation sets, and so on), you will need to recreate the error table because it must match exactly.

---

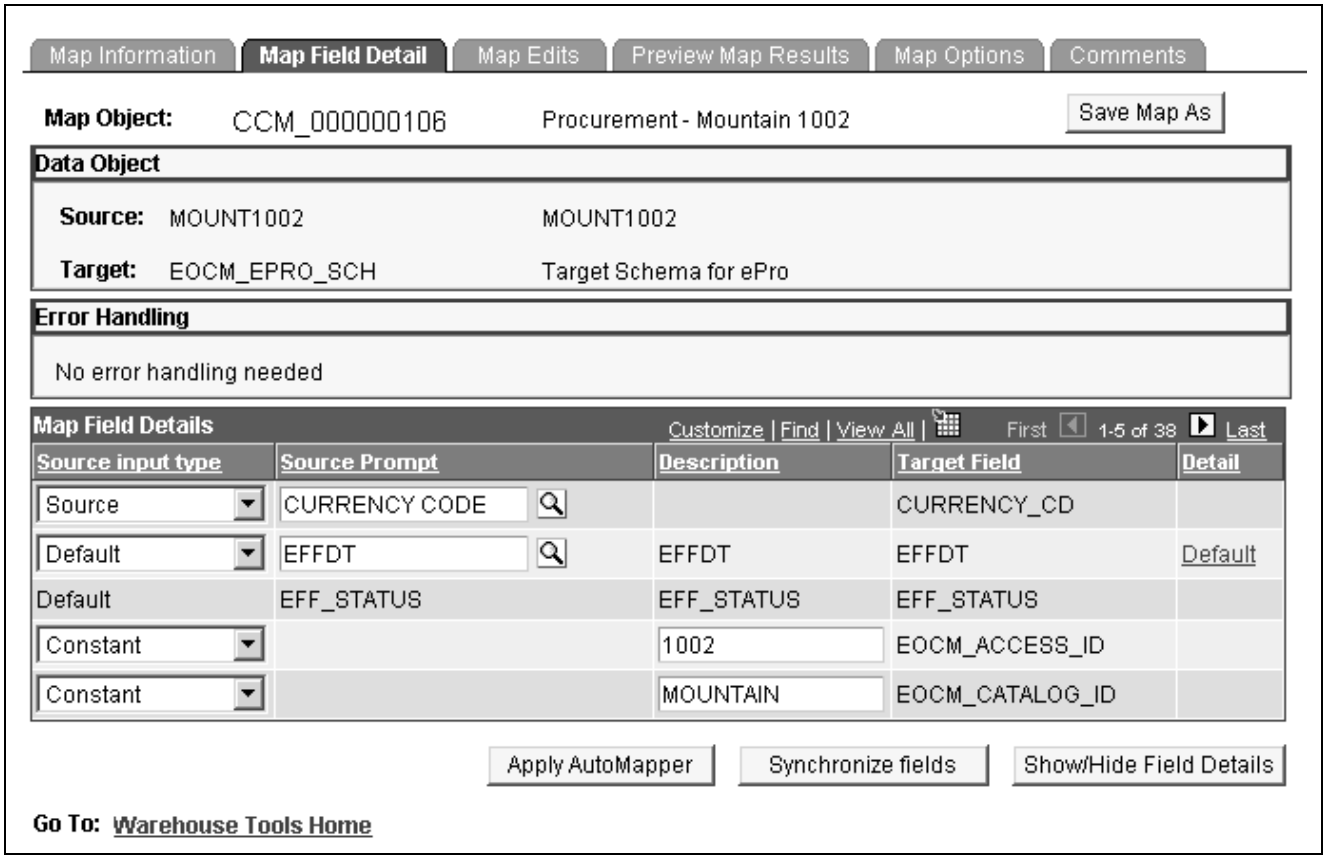
### See Also

Chapter 2, "Setting Up Core PeopleSoft Data Transformer Features," Defining Subject Areas, page 7

Chapter 6, "Running the Data Transformer Process and Correcting Errors," Understanding Extracting, Transforming, and Loading Source Data, page 58

## Defining Map Field Details

Access the Map Field Detail page.




Map Field Detail page

**Source Input Type**

*Blank:* If this field is left blank, the description field will default to a blank, zero, or the appropriate PeopleSoft null value. This null value will be inserted to the target field.

*Source:* Select if the value is from the source file. You are prompted to select a source prompt field from the source data object.

*Constant:* Select if the value is a constant value, and then enter that value. If a constant needs to be applied to more than one map, a default target field should be created.

*Default:* Select to use a default value, and then select a source prompt to select the appropriate target field default. Click the Default link to access the Set Target Field Default page to see the actual prompt value.

*Transformation:* Select to use a transformation, and then select a source prompt to select the appropriate transformation. Click the Transform link to view transformation definitions, or click the Add link to add a new definition by using the Transformation Wizard.

*Translation Set:* Select to use a translation set, and then select a source prompt to select the appropriate source data object field. Select a description which will be the appropriate translation set to apply to the source field. Click the Translation link to view translation set values, or click the Add link to add a new set.

**Source Prompt**

Select a source prompt based on your source input type. The prompt will change based on the source input type. Be aware of the mapping that you are setting up.

---

**Note.** Translation set and transformation source prompts are restricted by subject area and transformation type. Only objects that are in the map definition's current subject area and those in the default subject area appear on the page. Only Look Up and PeopleCode type transformations appear.

---

**Description**

The description will change based on the source input type and source prompt selected. Be aware of the mapping that you are setting up.

Enter a description if you selected *Constant* as the input type. The description is the value that you want mapped to the target field.

Enter a translation set if you selected *Translation Set* as the input type.

**Target Field**

Lists the name of all of the fields in your target file.

**Detail**

Displays the Transform, Default, or Translation link, based on the selected input type. This link transfers to the definition page of the selected item.

**Add**

Appears if the selected input type is *Transformation* or *Translation Set.* This link transfers to the definition page of the selected item in Add mode.

**Save Map As**

Click to save an existing map definition under a new map name.

Use this function to create a new map definition that will only slightly differ from the original map. Once saved, you can make the necessary changes to the new map. The new map is maintained separately.

**Apply AutoMapper** Click to initially define map field details.

AutoMapper automatically attempts to match the source to the target field list. It also applies any required map rules, including target field defaults, translation set values, and transformations. AutoMapper then maps remaining target fields with constant values from the PSRECFIELD.DBFIELDNAME.SQL assembler and coordinates the transformation steps.

If you must modify the mapping that is defined by AutoMapper, you can make these changes using the fields on this page.

---

***Warning!*** Rerunning the AutoMapper overrides any mappings that you have already done. Use caution before doing this-it is as if you are starting over with an Add function.

---

**Synchronize fields** Click this button to realign the source and target fields on the map with any changes that may have occurred since its origination.

You can add new fields to the target with PeopleSoft Application designer once a map has been saved. Using Synchronize fields will insert these new fields in the map field detail grid. Additional synchronization is done on source fields (based on the current source data object definition) and prompts. Selecting this button will not override previously saved mappings.

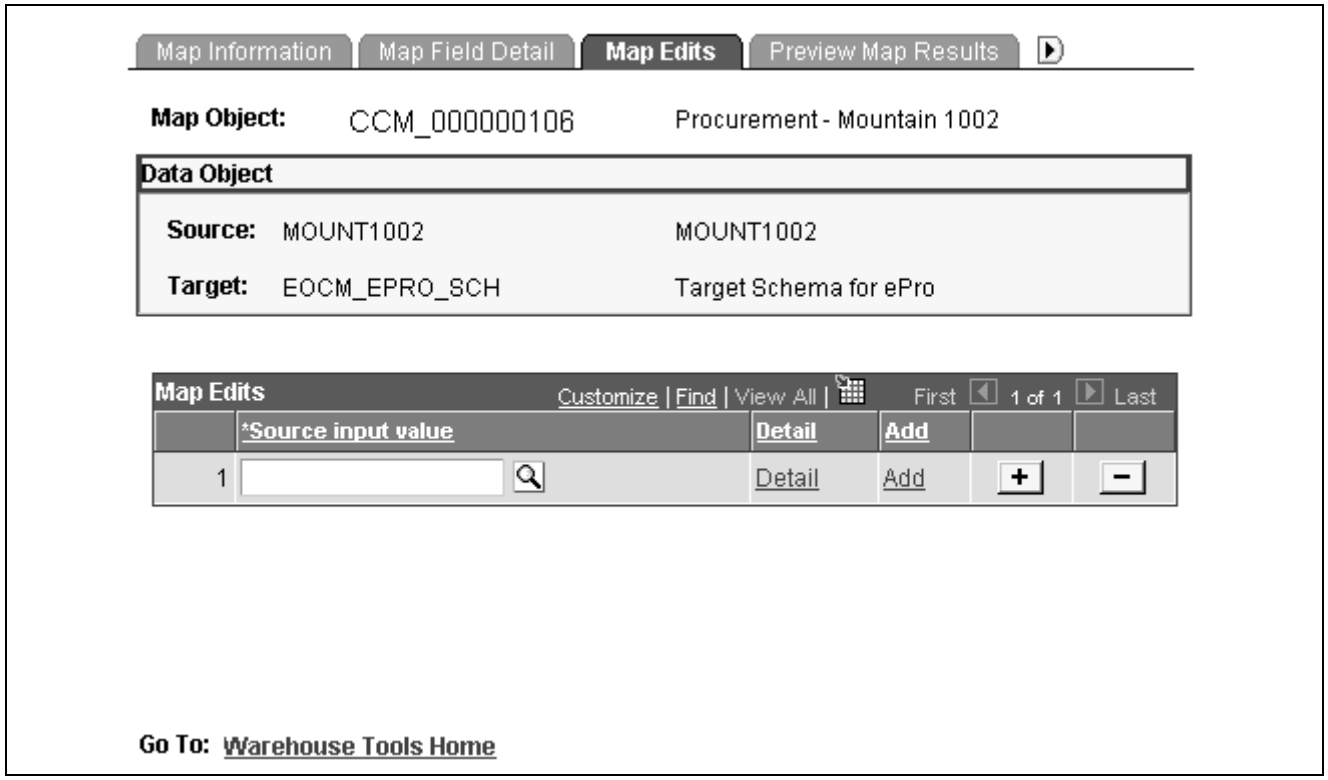
**Show/Hide Fields Details** Click this button to expand the grid to include field format and length information for both source and target fields. Click again to avoid the horizontal scroll.

### See Also

Chapter 4, “Preparing to Create Maps,” page 27

## Performing Map Edits

Access the Map Edits.




Map Edits page

**Source input value** Select an Edit transformation.

**Note.** The source input value prompt is restricted by subject area and transformation type. You see only those objects that are in the map definition's current subject area and those in the default subject area. You also see only edit transformations.

**Detail** Click to access the Transformation Definition page and edit transformation definition information.

**Add** Click to access the Transformation Definition page and add a new transformation.

### See Also

Chapter 4, "Preparing to Create Maps," Creating Transformations by Using the Transformation Wizard, page 33

## Previewing Map Results

Click the Preview button to view a subset of your mapped data based on your map definitions.

Access the Preview Map Results page.

Click the Preview button to view a subset of the results based on your map definition.

Use this feature to check the validity of the map. By previewing what the results of running the map would be against a small set of data, you can determine if your mappings are defined correctly.

**Note.** Attempting to preview complex maps can quickly consume processing and memory resources on your application server.

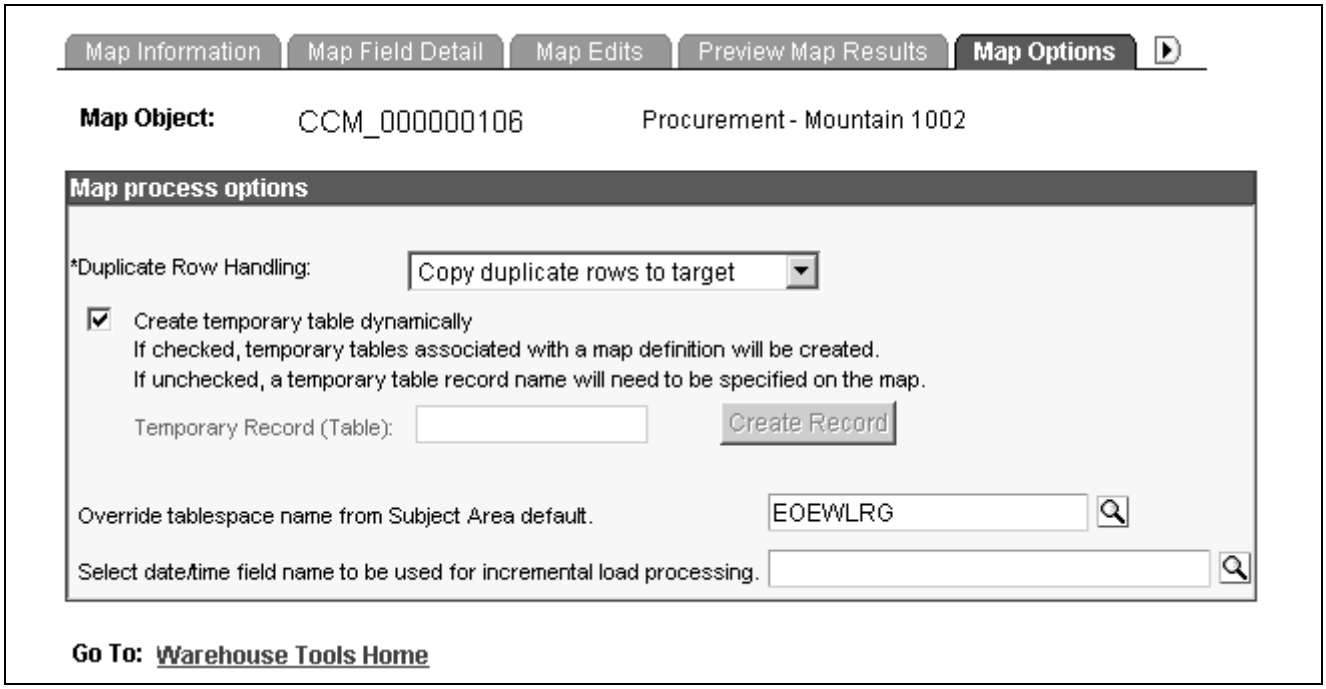
The preview maximum row count is set using the Data Transformer Installation Options page. Large row counts take more time and resources to preview. Consider setting your preview row count relatively low.

### See Also

Chapter 2, "Setting Up Core PeopleSoft Data Transformer Features," Defining Installation Options, page 6

## Updating Map Processing Options

Access the Map Options page.




Map Options page

**Note.** Only system administrators may access this page.

**Duplicate Row Handling**

*Copy Duplicates to Error Table:* Select to have the system copy all duplicate rows to the error table.

*Copy first row to Target:* Select so that if the system finds a duplicate row in the error table, it inserts only the first row of the duplicates into the target.

*Copy last row to Target:* Select so that if the system finds a duplicate row in the error table, the system inserts only the last row of the duplicates into the target.

*Reject all duplicate rows:* Select to have the system reject all duplicate rows and not log them in the error table.

**Note.** Values are based on the error handling that is specified on the Map Information page. If you don't see all of the preceding values, adjust the error handling option.

**(Optional) Create temporary table dynamically**

Select if you want to override the Data Transformer installation options and Subject Area selections for this map to create a temporary table at runtime.

This is needed only when an implementation allows or disallows the dynamic temporary table creation per subject area.

This temporary table is only needed by the engine and will be deleted at engine completion. It is not available in PeopleSoft metadata.

**Note.** If you do not select this check box, you will be required to specify a temporary table record name on the map for use at runtime. This record will be available in PeopleSoft metadata and live permanently after the engine execution. Determining which of these options to used needs to be carefully considered. A dynamic temporary table will automatically change when the map changes, a non-dynamic temporary table requires maintenance.

**Override tablespace name from Subject Area default**

Select to override the Data Transformer installation options and Subject Area options for specific maps. This is only necessary if the implementation chooses to spread the temporary tables that are generated at runtime over multiple tablespaces.

**Select date and time field name to be used for incremental load processing**

Only datetime field types appear in the prompt. This field is used at run time to determine the next segment of data to incrementally load.

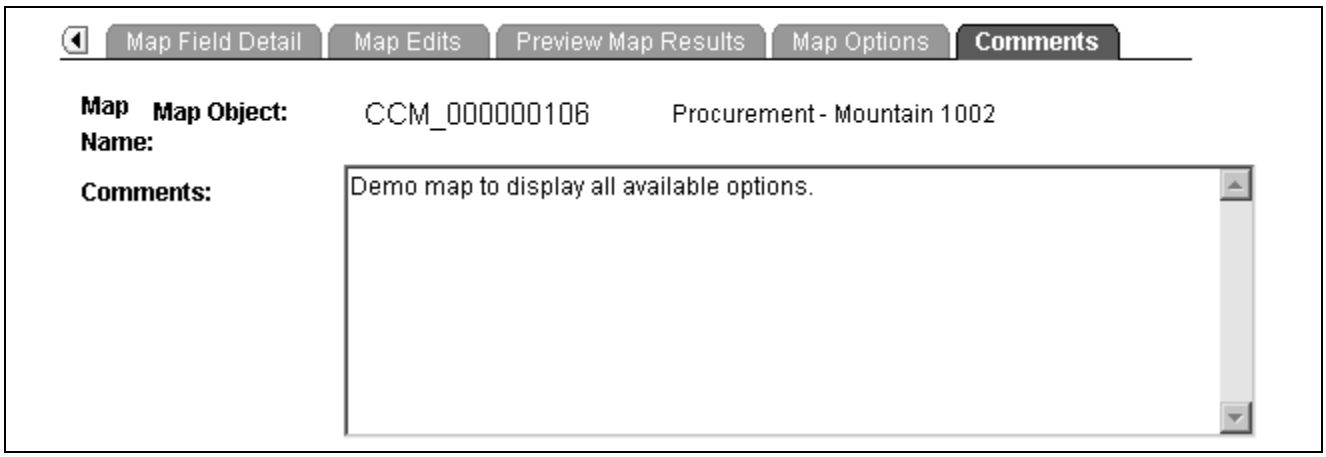
### See Also

Chapter 2, "Setting Up Core PeopleSoft Data Transformer Features," Defining Installation Options, page 6

Chapter 2, "Setting Up Core PeopleSoft Data Transformer Features," Defining Subject Areas, page 7

## Entering Map Definition Comments

Access the Map Definition - Comments page.




Map Definition - Comments page

Use the Comments field to provide details about the purpose of the map definition.

# CHAPTER 6

# Running the Data Transformer Process and Correcting Errors

This chapter discusses how to:

- Create map groups and map group chunking criteria.
- Extract, transform, and load source data using the Data Transformer Application Engine process (EOEW_ETL_EXE).
- Handle Data Transformation process errors.

## Defining Map Groups and Chunking Criteria

This section discusses how to:

- Define map groups.
- Define chunking criteria.

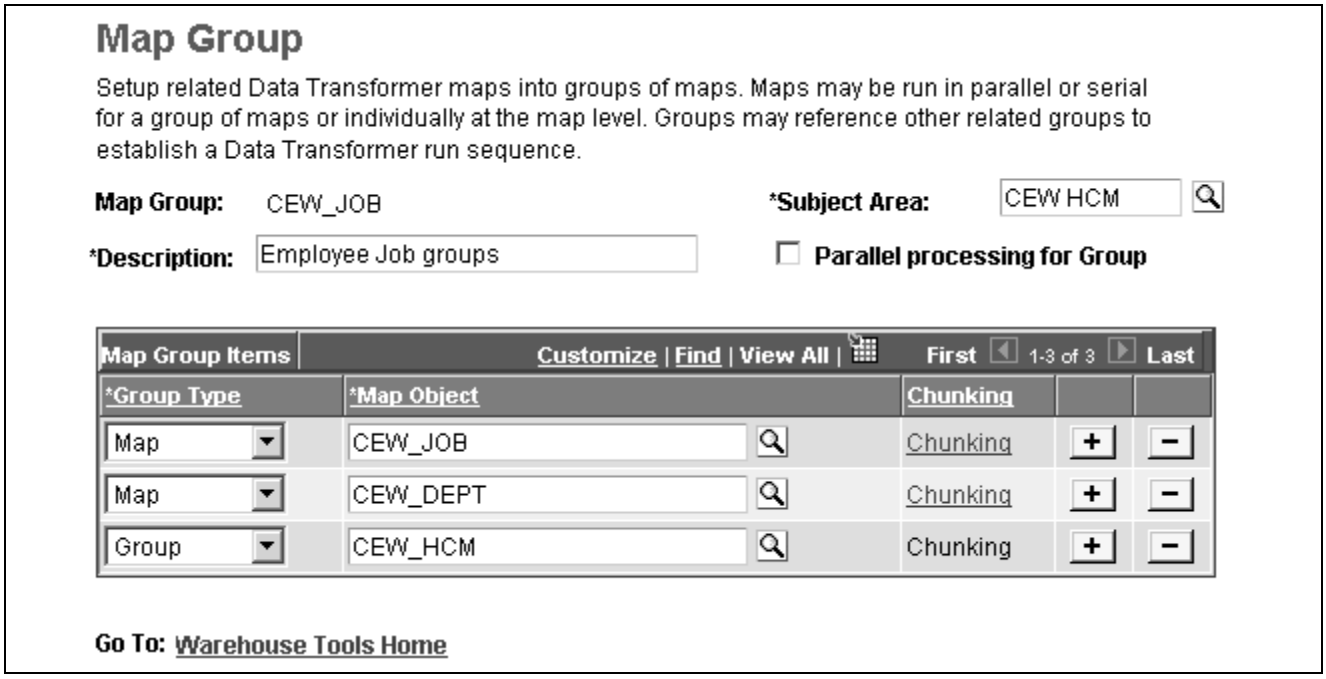
You can configure the Data Transformer process to run on maps as a group. A map group may contain map groups within the main map group, as well as one or more individual maps. Map groups are submitted as a job unit and can run either in serial or parallel mode. To optimize performance by processing data more efficiently, you can define chunking criteria on the Map Group Filter page.

### Pages Used to Define Map Groups and Chunking Criteria

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Map Group | EOEW_GRP_DFN | Enterprise Components, Warehouse Tools, Map Group | Create map groups. |
| Map Group Filter | EOEW_GRP_FLTR | Click the Chunking link on the Map Groups page. | Define chunking criteria for maps. |

### Defining Map Groups

Access the Map Groups page.




Map Group page

**Subject Area** Select a subject area.

For new maps groups, the subject area will be set to the default as defined on the Subject Area page.

**Parallel processing for Group** Select to run the process in parallel mode, which runs the processes simultaneously. Clear to run it in serial mode, which runs each process in the map group sequentially.

**Group Type** and **Map Object** Select the maps and/or map groups that you want in the order in which you want them to run.

---

**Note.** Map object prompts are restricted by subject area. Only objects that are in the map group's current subject area and those in the default subject area appear.

---

**(Optional) Chunking** Click to access the Map Group Filter page to define chunking criteria for the associated map.

See Chapter 6, "Running the Data Transformer Process and Correcting Errors," Defining Chunking Criteria, page 57.

---

**Note.** The Chunking link is only available for Group Types of Map. If you want to chunk a group, you need to go to that group's definition to define the criteria.

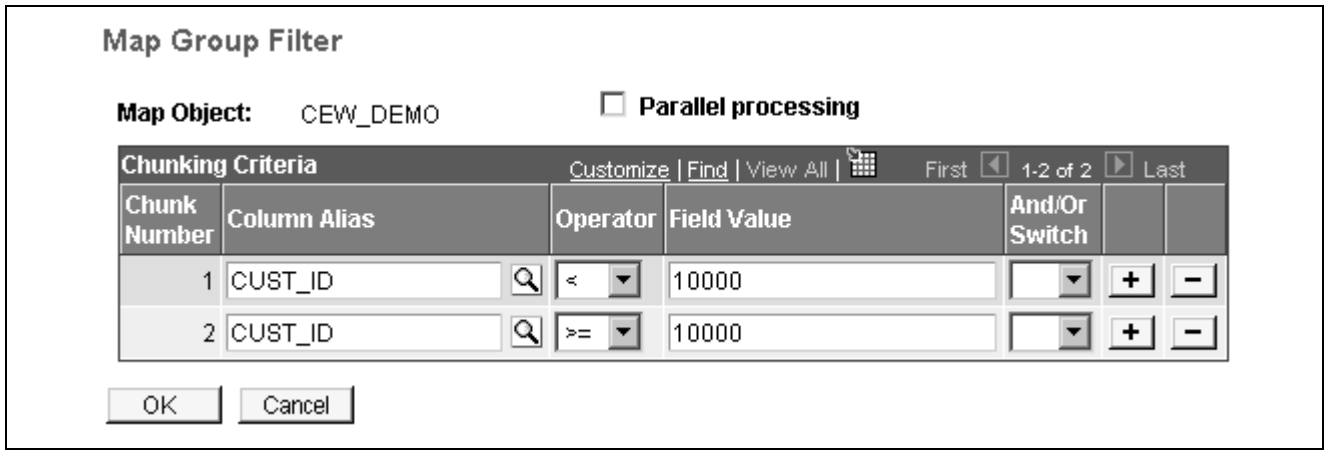
---

## See Also

Chapter 2, "Setting Up Core PeopleSoft Data Transformer Features," Defining Subject Areas, page 7

## Defining Chunking Criteria

Access the Map Group Filter page.




Map Group Filter page

Chunking is a mechanism that makes large amounts of processing easier through the use of multiple small parallel processes. By enabling chunking, multiple jobs are spawned from one job stream. These jobs run in parallel or serial to process data efficiently. It is an optional mechanism to help with performance. The user is responsible to define chunks that include all of the source data without duplicating any rows. The system will not verify this. The map group is still the unit of work. The group job is not complete until all of the chunks are also complete.

**Parallel processing** Select to run the process in parallel mode, which runs the processes simultaneously. Clear to run it in serial mode, which runs each process in the chunk sequentially.

**Column Alias** Select a column alias. Available values are derived from the source data object for the map you are currently chunking.

**Operator** Select an operator to define the chunking condition

**Field Value** Enter the field value that completes criteria for the chunk number.

**And/Or Switch** Select *And* or *Or* to compound multiple sets of criteria.

**Note.** The chunks you define must be configured to capture all of the source data without duplicating rows.

# Extracting, Transforming, and Loading Source Data

In this section, we discuss how to:

- Extract, transform, and load source data using the Data Transformer process.
- View summaries of a Data Transformer process run control.

## Understanding Extracting, Transforming, and Loading Source Data

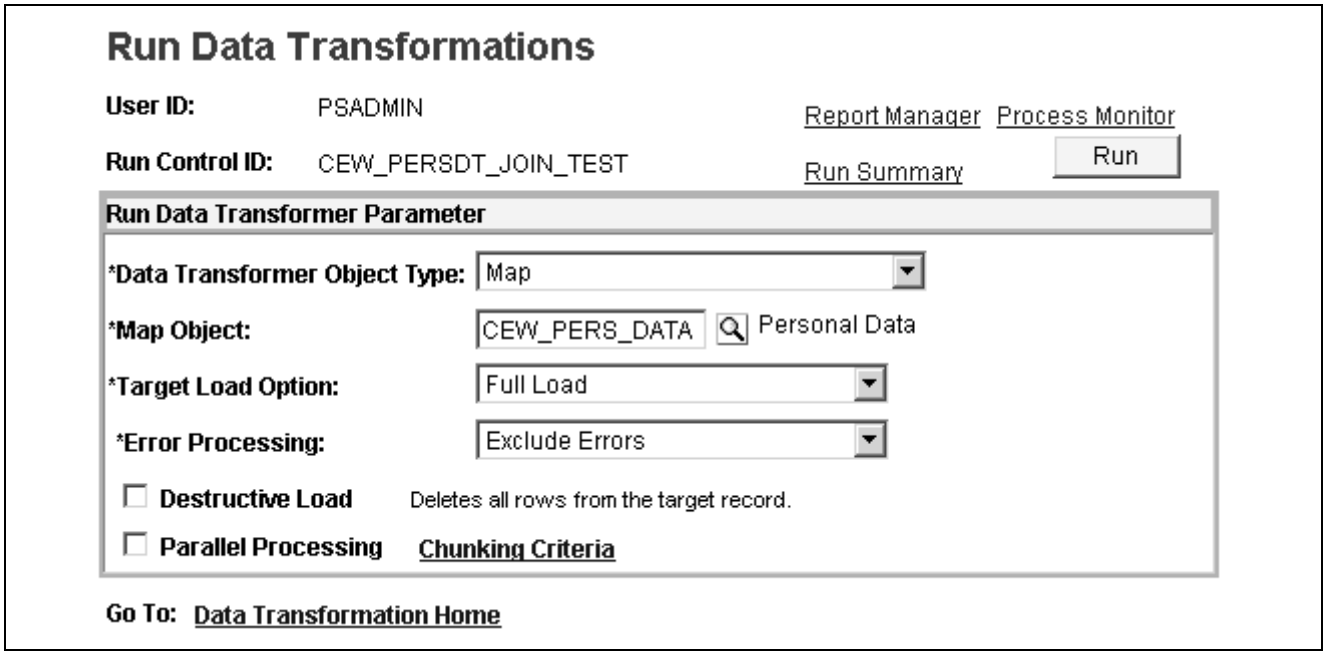
The Data Transformer process can be run to extract, transform and load source data by a single map or by map groups. When a map or group is executed, it is compiled at runtime. No SQL or code, only metadata, is stored. This reduces the risk of encountering problems late in a multi-map process, guarantees that each parallel process is executing the same version, and insulates the current running job from any changes to the actual map definition.

## Pages Used to Extract, Transform, and Load Source Data

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Run Data Transformations | EOEW_RUN_ETL | Enterprise Components, Warehouse Tools, Run Data Transformer | Define run control criteria for and run the Data Transformer process. |
| Run Data Transformer - Run Summary | EOEW_RUN_ETL_SUM | Click the Run Summary link on the Run Data Transformer page. | View information about only the jobs related to a particular Data Transformer process run control. |

## Running the Data Transformer Process

Access the Run Data Transformer page.




Run Data Transformations page

**Data Transformer Object Type**

Select a Data Transformer object type. You can run either a *Map* or *Map Group*.

**Note.** PeopleSoft Catalog Management uses the run control ID *RUN_MAP* to load partner source data. When using this run control ID, the Data Transformer object type must be *Map*.

**Map Object**

Select a map object. The prompt for available field values is based on the Data Transformer object type.

**Target Load Option**

Select a target load option.

*Full Load.* Extracts all data from the source as defined by the source data object and inserts into the target.

*Incremental Update.* Copies all rows from the source table that have been updated or modified since the last load, based on the date/time the row was updated or modified. The Map Options page must have a date/timestamp field defined in order to use incremental load.

**Error Processing**

This field is accessible only if the map object being run has the *Correct data error & reprocess* option selected on the Map Information page. Available values are:

*Include Errors*

*Exclude Errors*

**Destructive Load**

Select to delete all rows from the target table before the new rows are inserted.

***Warning!*** Use this option with caution, as this will delete all rows in the target table.

**Parallel processing**

Select to run the process in parallel mode, which runs the processes simultaneously. Clear to run it in serial mode, which runs each process in the chunk sequentially.

**Note.** This option is only available if the Object Type is *Map*.

**Chunking Criteria**

Click to access the Map Group Filter page to define chunking criteria for the associated map.

See Chapter 6, "Running the Data Transformer Process and Correcting Errors," Defining Chunking Criteria, page 57.

**Note.** This link is only available for Group Types of *Map*. If you want to chunk a group, you need to go to that group's definition to define the criteria.

**Run**

Click to run the Data Transformer process. A process request is submitted.

Click the Process Monitor link to monitor the status of the request.

**Run Summary**

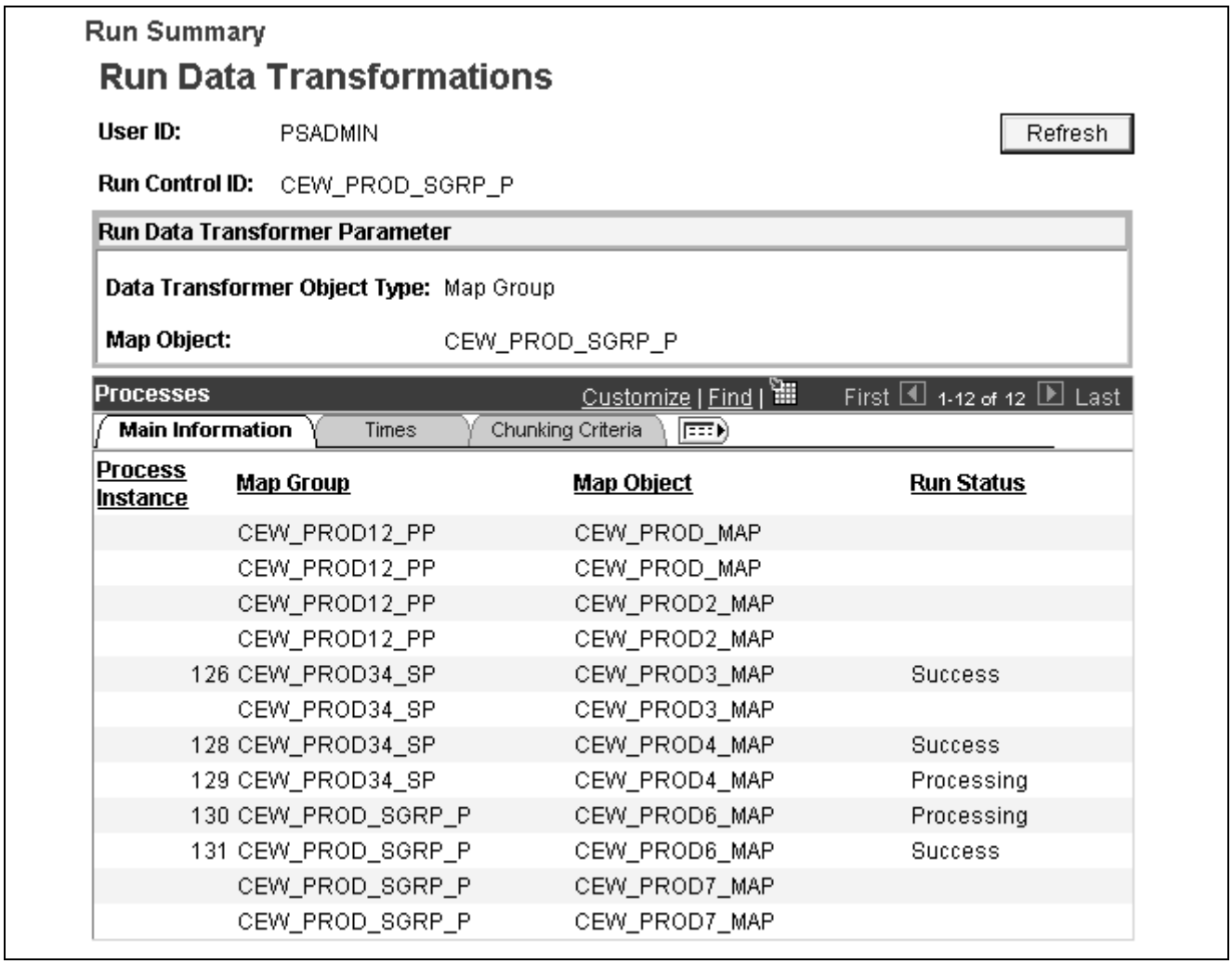
Click to view information that is related to the status of the Data Transformer process.

### See Also

*PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler.*

## Viewing the Run Summary

Access the Run Summary - Run Data Transformations page.




Run Summary - Run Data Transformations page

After running a Data Transformer process by clicking Run on the Run Data Transformer page, you can access the Run Summary page just as you would access Report Manager or Process Monitor.

Although the Process Monitor provides information regarding a process run, the Run Summary feature offers a more granular view of the individual subprocesses, such as chunks, that are not exposed in the Process Monitor. For example, a single map containing chunks or a group can spawn numerous jobs. If you use the Process Monitor to view these jobs, you find that the numerous jobs that are associated with a single map are mixed in with all of the other jobs that are currently running. Depending on the number of jobs that are running, this can make it difficult to view only those jobs that are associated with a particular Data Transformer process run control.

However, by using the Run Summary feature you can view all of the jobs that were spawned for the run control that is associated with a particular run on of the Data Transformer process. The Run Summary feature is especially useful when running parallel processes that are associated with multiple maps. By using the Run Summary feature, you can associate a process instance with each chunk as it runs.

The Run Summary feature enables you to see:

- Which subprocesses are involved within a particular Data Transformer process run control.
- When a particular subprocess (chunk or map) begins.
- When a particular subprocess (chunk or map) completes.
- Which subprocesses didn't complete successfully.
- Which process instance is associated with a particular chunk or map.

### Main Information

Select the Main Information tab.

**Process Instance** Displays the PeopleSoft Process Scheduler process instance that is assigned to the individual process. This value also appears on the Times and Chunking Criteria tabs for consistent identification.

**Note.** For parallel processes, you see different process instances; for serial processes, you see the same process instance.

**Run Status** Reflects the same status that appears in the Process Monitor. If the run status displays an error, go to the Process Monitor to troubleshoot and restart the process.

### Times

Select the Times tab.

Use these times to track the performance of the processes.

### Chunking Criteria

Select the Chunking Criteria tab.

**Chunking Where clause** Displays information about the chunking criteria that is specified for a particular map, including:

- Relational operators (=, <, >, and so on).
- Boolean operators (AND and OR).

**Note.** This page also displays information that is relevant only to the internal aspects of the PeopleSoft mapping functionality.

The field names that are used for chunking are converted to an internal format; therefore, the format of the Chunking Where clause may not necessarily be a true reflection. That is, it may contain an extra "AND

(“), for example. However, determining the chunking criteria that is used can be very useful when you are troubleshooting.

Also, values that are similar to EOEW_FP_CHAR30_0 are used internally by the PeopleSoft system to store data in a temporary table while the data is being transformed and loaded.

# Handling Data Transformer Process Errors

In this section, we discuss how to view and correct data transformation errors that arise from a run of the Data Transformer process.

## Understanding Data Transformer Process Errors

After you run the Data Transformer process for a map with the *Correct data error & reprocess* option selected, use the Error Correction page to check for any errors that were logged during runtime. You can correct these errors online and rerun the Data Transformer process with the *Include Errors* option selected.

The Error Correction page sources its information from a PeopleSoft table specified on the Map Field Detail page. When the Data Transformer process runs and finds an error (such as a look-up or edit on an entry not found), it writes an entry into this error table.

The error table comprises:

- Two key fields, PROCESS_INSTANCE and EOEW_ETL_SEQNUM.
- Error message fields from the EOEW_ERRMSG_SBR subrecord (EOEW_ERR_ MSG01..EOEW_ERR_MSG10).
- All the fields being sourced from the Source Data Object.

Whenever an error is encountered for a look-up or edit transformation, the Data Transformer process stores the associated error message set number and message number in the error fields (EOEW_ERRMSG_XX) that are found in the error table so that the user can then troubleshoot the rows with errors.

By default, PeopleSoft allocates 10 error messages on the EOEW_ERRMSG_SBR subrecord (each error message field includes the message set number and message number), but users can delete or add more error message fields on the subrecord, as needed.

If more errors are encountered during the Data Transformer process run than are allocated on the error table, those errors that are encountered after the limit was reached are not written to the error table. Every error record must include one or more EOEW_ERRMSG_XX fields. The errors that are encountered during the Data Transformer process appear on the Error Correction page. The Error Correction page displays error messages that are associated with each specific row of data that is found to be in error by the Data Transformer process.

### See Also

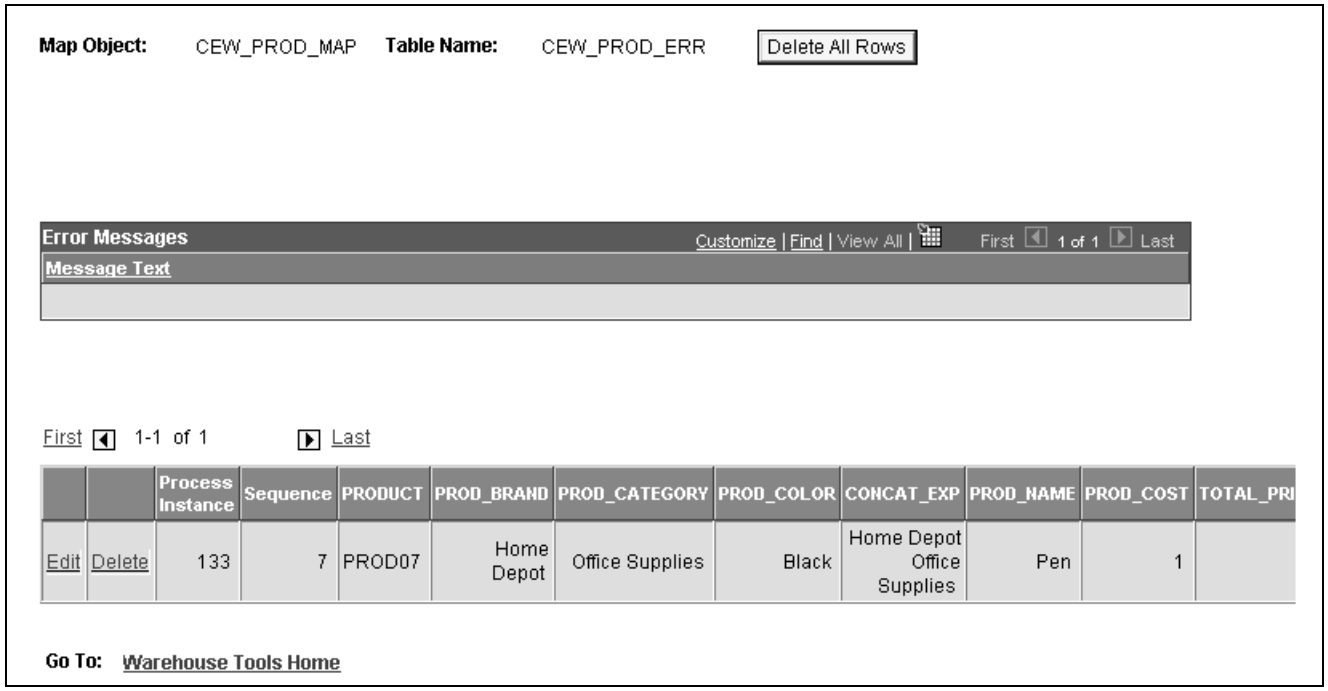
*PeopleTools 8.44 PeopleBook: PeopleCode Reference.*

# Page Used to Handle Data Transformer Process Errors

| Page Name | Object Name | Navigation | Usage |
|---|---|---|---|
| Error Correction | EOEW_CORRECTION | Enterprise Components, Warehouse Tools, Error Correction | View and correct Data Transformer process errors. |

# Viewing and Correcting Data Transformer Process Errors

Access the Error Correction page.




Error Correction page

After you use this page to correct all errors, rerun the map.

**Edit** Select for the row that you want to correct. The Field list appears at the top of the page with the associated error message for that row.

**Delete** Select to remove the current row. This will physically delete the error row from the error table.

**Delete All Rows** Select to remove all current rows. This will physically delete all error rows from the error table.

**Field** Select the field you want to edit. Enter the new, corrected value for the field.

**Update** Click to save the correction to the field.

# APPENDIX A

# Setting PeopleSoft Data Transformer Security

This appendix provides an overview of security and discusses how to implement security:

## Understanding Security

This section discusses:

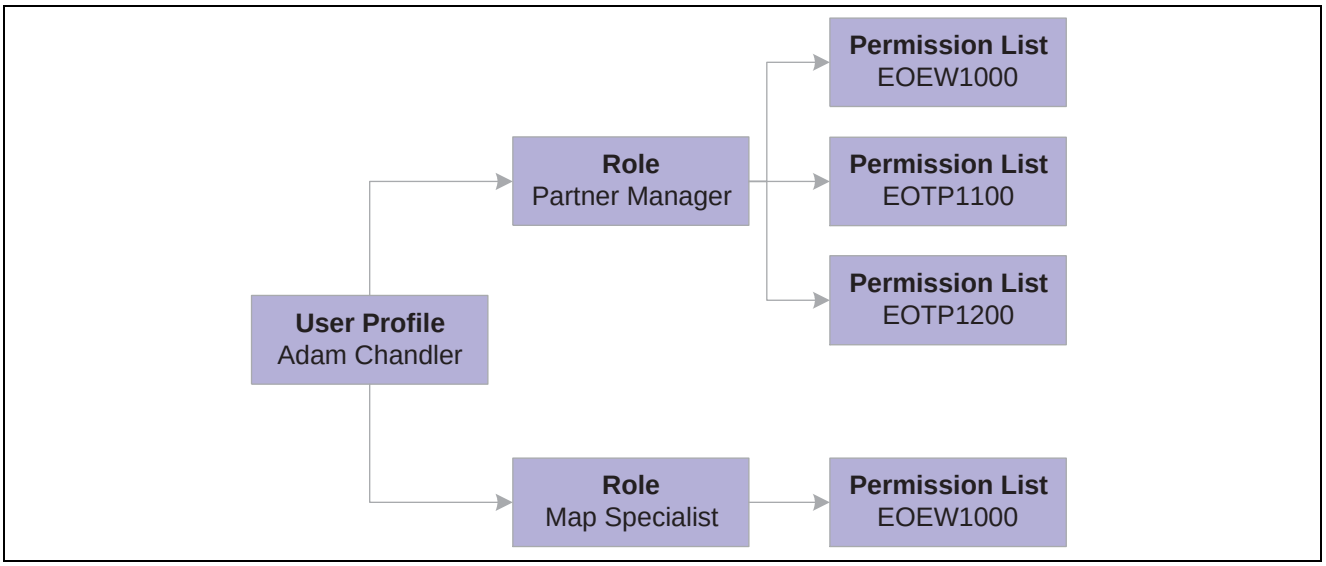
- User profiles, roles, and permission lists.
- Delivered roles and permission lists.

### User Profiles, Roles, and Permission Lists

You assign roles to user profiles. Roles link user profiles to permission lists, which group authorizations.

Permission lists store sign-on times, page access, PeopleTools access, and so on. You can assign multiple roles to a user profile, and you can assign multiple permission lists to a role.

This diagram illustrates the interaction between user profile, roles, and permission lists:




Security definition hierarchy

### Delivered Roles and Permission Lists

Access to PeopleSoft Data Transformer is based on roles and permission lists that are attached to user IDs.

PeopleSoft delivers the following roles that are configured to perform PeopleSoft Data Transformer functions:

| Role | Permission List Access | Responsibilities |
|---|---|---|
| Enterprise Administrator | EOEW9000 | Has access to all warehouse objects and performs all tasks that are related to PeopleSoft Data Transformer, including creating and maintaining source data objects, default target values, translation set values, and map definitions, and running Data Transformer maps. |
| Map Specialist | EOEW1000 | Performs all tasks that are related to PeopleSoft Data Transformer, but typically does not set up complex source data objects or transformations. |

Permission lists are delivered to support all PeopleSoft Data Transformer features. This table lists the components that are attached to each of the delivered permission lists.

**Note.** Both permission lists have access to all PeopleSoft Data Transformer-related components.

| Permission List | Component | Component Name |
|---|---|---|
| EOEW1000 | EOEW_TOOLS_HOMEPG | Warehouse Tools Home Page. |
| EOEW9000 | EOEW_OPTIONS | ETL Installation Options. |
| | EOEW_OBJ_OWNER | Subject Area. |
| | EOEW_SRCDO | Source Data Object. |
| | EOEW_SET_DFLT | Set Default Values. |
| | EOEW_CODE_SET | Translation Set Values. |
| | EOEW_LU_DFN_INFO | Look up Definition Info. |
| | EOEW_TRN_DFN_WIZ | Transformation Definition. |
| | EOEW_RULE_DFN | Map Rule Definition. |
| | EOEW_MAP_DFN | Map Definition. |
| | EOEW_GRP_DFN | Map Group. |
| | EOEW_CORRECTION | Error Correction. |
| | EOEW_RUN_ETL | Run Data Transformer. |

Although both permission lists have access to all PeopleSoft Data Transformer-related components, the following pages are not accessible for permission list EOEW1000:

| Component | Page |
|---|---|
| EOEW_OPTIONS | ETL Installation Options - Display Only. |
| EOEW_OBJ_OWNER | Subject Area Owner - Display Only. |
| EOEW_RULE_DFN | Map Rule Definition - No Access. |
| EOEW_MAP_DFN | Map Options - No Access. |
| EOEW_MAP_DFN | Publish Map Option - No Access. |

# Implementing Security

This section provides an overview of security tasks and discusses how to:

- Associate the EOEW1000 permission list with a role.
- Assign the Map Specialist role to a user profile.

### See Also

*PeopleTools 8.44 PeopleBook: PeopleTools Security.*

## Understanding Security Tasks

To allow map specialists to perform data transformer activities you must:

- Associate the permission list EOEW1000 with *all* roles that are assigned to be map specialists.

**Note.** PeopleSoft delivers the Map Specialist role for this purpose.

- Assign the Map Specialist role to the necessary user profiles.

## Associating the EOEW1000 Permission List with a Role

To associate the EOEW1000 permission list with a role:

1. Select PeopleTools, Security, Permissions & Roles, Roles.
2. Enter a role.
3. Access the Permission List page.
4. Add the EOEW1000 permission list to the list of permission lists that are currently attached to the role.
5. Click Save.

## Assigning the Map Specialist Role to a User Profile

To assign the Map Specialist role to a user profile:

1. Select PeopleTools, Security, User Profiles, User Profiles.

2. Enter a user profile.
3. Access the Roles page.
4. Add the Map Specialist role to the list of roles that are currently attached to the user profile.
5. Click Save.

# Glossary of PeopleSoft Terms

**absence entitlement** This element defines rules for granting paid time off for valid absences, such as sick time, vacation, and maternity leave. An absence entitlement element defines the entitlement amount, frequency, and entitlement period.

**absence take** This element defines the conditions that must be met before a payee is entitled to take paid time off.

**accounting class** In PeopleSoft Enterprise Performance Management, the accounting class defines how a resource is treated for generally accepted accounting practices. The Inventory class indicates whether a resource becomes part of a balance sheet account, such as inventory or fixed assets, while the Non-inventory class indicates that the resource is treated as an expense of the period during which it occurs.

**accounting date** The accounting date indicates when a transaction is recognized, as opposed to the date the transaction actually occurred. The accounting date and transaction date can be the same. The accounting date determines the period in the general ledger to which the transaction is to be posted. You can only select an accounting date that falls within an open period in the ledger to which you are posting. The accounting date for an item is normally the invoice date.

**accounting split** The accounting split method indicates how expenses are allocated or divided among one or more sets of accounting ChartFields.

**accumulator** You use an accumulator to store cumulative values of defined items as they are processed. You can accumulate a single value over time or multiple values over time. For example, an accumulator could consist of all voluntary deductions, or all company deductions, enabling you to accumulate amounts. It allows total flexibility for time periods and values accumulated.

**action reason** The reason an employee's job or employment information is updated. The action reason is entered in two parts: a personnel action, such as a promotion, termination, or change from one pay group to another—and a reason for that action. Action reasons are used by PeopleSoft Human Resources, PeopleSoft Benefits Administration, PeopleSoft Stock Administration, and the COBRA Administration feature of the Base Benefits business process.

**action template** In PeopleSoft Receivables, outlines a set of escalating actions that the system or user performs based on the period of time that a customer or item has been in an action plan for a specific condition.

**activity** In PeopleSoft Enterprise Learning Management, an instance of a catalog item (sometimes called a class) that is available for enrollment. The activity defines such things as the costs that are associated with the offering, enrollment limits and deadlines, and waitlisting capacities.

In PeopleSoft Enterprise Performance Management, the work of an organization and the aggregation of actions that are used for activity-based costing.

In PeopleSoft Project Costing, the unit of work that provides a further breakdown of projects—usually into specific tasks.

In PeopleSoft Workflow, a specific transaction that you might need to perform in a business process. Because it consists of the steps that are used to perform a transaction, it is also known as a step map.

**agreement** In PeopleSoft eSettlements, provides a way to group and specify processing options, such as payment terms, pay from a bank, and notifications by a buyer and supplier location combination.

**allocation rule** In PeopleSoft Enterprise Incentive Management, an expression within compensation plans that enables the system to assign transactions to nodes and participants. During transaction allocation, the allocation engine traverses the compensation structure from the current node to the root node, checking each node for plans that contain allocation rules.

**alternate account** A feature in PeopleSoft General Ledger that enables you to create a statutory chart of accounts and enter statutory account transactions at the detail transaction level, as required for recording and reporting by some national governments.

**AR specialist** Abbreviation for *receivables specialist.* In PeopleSoft Receivables, an individual in who tracks and resolves deductions and disputed items.

**arbitration plan** In PeopleSoft Enterprise Pricer, defines how price rules are to be applied to the base price when the transaction is priced.

**assessment rule** In PeopleSoft Receivables, a user-defined rule that the system uses to evaluate the condition of a customer's account or of individual items to determine whether to generate a follow-up action.

**asset class** An asset group used for reporting purposes. It can be used in conjunction with the asset category to refine asset classification.

**attribute/value pair** In PeopleSoft Directory Interface, relates the data that makes up an entry in the directory information tree.

**authentication server** A server that is set up to verify users of the system.

**base time period** In PeopleSoft Business Planning, the lowest level time period in a calendar.

**benchmark job** In PeopleSoft Workforce Analytics, a benchmark job is a job code for which there is corresponding salary survey data from published, third-party sources.

**book** In PeopleSoft Asset Management, used for storing financial and tax information, such as costs, depreciation attributes, and retirement information on assets.

**branch** A tree node that rolls up to nodes above it in the hierarchy, as defined in PeopleSoft Tree Manager.

**budgetary account only** An account used by the system only and not by users; this type of account does not accept transactions. You can only budget with this account. Formerly called "system-maintained account."

**budget check** In commitment control, the processing of source transactions against control budget ledgers, to see if they pass, fail, or pass with a warning.

**budget control** In commitment control, budget control ensures that commitments and expenditures don't exceed budgets. It enables you to track transactions against corresponding budgets and terminate a document's cycle if the defined budget conditions are not met. For example, you can prevent a purchase order from being dispatched to a vendor if there are insufficient funds in the related budget to support it.

**budget period** The interval of time (such as 12 months or 4 quarters) into which a period is divided for budgetary and reporting purposes. The ChartField allows maximum flexibility to define operational accounting time periods without restriction to only one calendar.

**business event** In PeopleSoft Receivables, defines the processing characteristics for the Receivable Update process for a draft activity.

| | |
|---|---|
| | In PeopleSoft Sales Incentive Management, an original business transaction or activity that may justify the creation of a PeopleSoft Enterprise Incentive Management event (a sale, for example). |
| **business unit** | A corporation or a subset of a corporation that is independent with regard to one or more operational or accounting functions. |
| **buyer** | In PeopleSoft eSettlements, an organization (or business unit, as opposed to an individual) that transacts with suppliers (vendors) within the system. A buyer creates payments for purchases that are made in the system. |
| **catalog item** | In PeopleSoft Enterprise Learning Management, a specific topic that a learner can study and have tracked. For example, “Introduction to Microsoft Word.” A catalog item contains general information about the topic and includes a course code, description, categorization, keywords, and delivery methods. A catalog item can have one or more learning activities. |
| **catalog map** | In PeopleSoft Catalog Management, translates values from the catalog source data to the format of the company’s catalog. |
| **catalog partner** | In PeopleSoft Catalog Management, shares responsibility with the enterprise catalog manager for maintaining catalog content. |
| **categorization** | Associates partner offerings with catalog offerings and groups them into enterprise catalog categories. |
| **channel** | In PeopleSoft MultiChannel Framework, email, chat, voice (computer telephone integration [CTI]), or a generic event. |
| **ChartField** | A field that stores a chart of accounts, resources, and so on, depending on the PeopleSoft application. ChartField values represent individual account numbers, department codes, and so forth. |
| **ChartField balancing** | You can require specific ChartFields to match up (balance) on the debit and the credit side of a transaction. |
| **ChartField combination edit** | The process of editing journal lines for valid ChartField combinations based on user-defined rules. |
| **ChartKey** | One or more fields that uniquely identify each row in a table. Some tables contain only one field as the key, while others require a combination. |
| **checkbook** | In PeopleSoft Promotions Management, enables you to view financial data (such as planned, incurred, and actual amounts) that is related to funds and trade promotions. |
| **Class ChartField** | A ChartField value that identifies a unique appropriation budget key when you combine it with a fund, department ID, and program code, as well as a budget period. Formerly called *sub-classification.* |
| **clone** | In PeopleCode, to make a unique copy. In contrast, to *copy* may mean making a new reference to an object, so if the underlying object is changed, both the copy and the original change. |
| **collection** | To make a set of documents available for searching in Verity, you must first create at least one collection. A collection is set of directories and files that allow search application users to use the Verity search engine to quickly find and display source documents that match search criteria. A collection is a set of statistics and pointers to the source documents, stored in a proprietary format on a file server. Because a collection can only store information for a single location, PeopleSoft maintains a set of collections (one per language code) for each search index object. |

**collection rule** In PeopleSoft Receivables, a user-defined rule that defines actions to take for a customer based on both the amount and the number of days past due for outstanding balances.

**compensation object** In PeopleSoft Enterprise Incentive Management, a node within a compensation structure. Compensation objects are the building blocks that make up a compensation structure's hierarchical representation.

**compensation structure** In PeopleSoft Enterprise Incentive Management, a hierarchical relationship of compensation objects that represents the compensation-related relationship between the objects.

**condition** In PeopleSoft Receivables, occurs when there is a change of status for a customer's account, such as reaching a credit limit or exceeding a user-defined balance due.

**configuration parameter catalog** Used to configure an external system with PeopleSoft. For example, a configuration parameter catalog might set up configuration and communication parameters for an external server.

**configuration plan** In PeopleSoft Enterprise Incentive Management, configuration plans hold allocation information for common variables (not incentive rules) and are attached to a node without a participant. Configuration plans are not processed by transactions.

**content reference** Content references are pointers to content registered in the portal registry. These are typically either URLs or iScripts. Content references fall into three categories: target content, templates, and template pagelets.

**context** In PeopleCode, determines which buffer fields can be contextually referenced and which is the current row of data on each scroll level when a PeopleCode program is running.

In PeopleSoft Enterprise Incentive Management, a mechanism that is used to determine the scope of a processing run. PeopleSoft Enterprise Incentive Management uses three types of context: plan, period, and run-level.

**control table** Stores information that controls the processing of an application. This type of processing might be consistent throughout an organization, or it might be used only by portions of the organization for more limited sharing of data.

**cost profile** A combination of a receipt cost method, a cost flow, and a deplete cost method. A profile is associated with a cost book and determines how items in that book are valued, as well as how the material movement of the item is valued for the book.

**cost row** A cost transaction and amount for a set of ChartFields.

**current learning** In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's in-progress learning activities and programs.

**data acquisition** In PeopleSoft Enterprise Incentive Management, the process during which raw business transactions are acquired from external source systems and fed into the operational data store (ODS).

**data elements** Data elements, at their simplest level, define a subset of data and the rules by which to group them.

For Workforce Analytics, data elements are rules that tell the system what measures to retrieve about your workforce groups.

**dataset** A data grouping that enables role-based filtering and distribution of data. You can limit the range and quantity of data that is displayed for a user by associating dataset rules with user roles. The result of dataset rules is a set of data that is appropriate for the user's roles.

**delivery method** In PeopleSoft Enterprise Learning Management, identifies the primary type of delivery method in which a particular learning activity is offered. Also provides default values for the learning activity, such as cost and language. This is primarily used to help learners search the catalog for the type of delivery from which they learn best. Because PeopleSoft Enterprise Learning Management is a blended learning system, it does not enforce the delivery method.

In PeopleSoft Supply Chain Management, identifies the method by which goods are shipped to their destinations (such as truck, air, rail, and so on). The delivery method is specified when creating shipment schedules.

**delivery method type** In PeopleSoft Enterprise Learning Management, identifies how learning activities can be delivered—for example, through online learning, classroom instruction, seminars, books, and so forth—in an organization. The type determines whether the delivery method includes scheduled components.

**directory information tree** In PeopleSoft Directory Interface, the representation of a directory's hierarchical structure.

**document sequencing** A flexible method that sequentially numbers the financial transactions (for example, bills, purchase orders, invoices, and payments) in the system for statutory reporting and for tracking commercial transaction activity.

**dynamic detail tree** A tree that takes its detail values—dynamic details—directly from a table in the database, rather than from a range of values that are entered by the user.

**edit table** A table in the database that has its own record definition, such as the Department table. As fields are entered into a PeopleSoft application, they can be validated against an edit table to ensure data integrity throughout the system.

**effective date** A method of dating information in PeopleSoft applications. You can predate information to add historical data to your system, or postdate information in order to enter it before it actually goes into effect. By using effective dates, you don't delete values; you enter a new value with a current effective date.

**EIM ledger** Abbreviation for *Enterprise Incentive Management ledger.* In PeopleSoft Enterprise Incentive Management, an object to handle incremental result gathering within the scope of a participant. The ledger captures a result set with all of the appropriate traces to the data origin and to the processing steps of which it is a result.

**elimination set** In PeopleSoft General Ledger, a related group of intercompany accounts that is processed during consolidations.

**entry event** In PeopleSoft General Ledger, Receivables, Payables, Purchasing, and Billing, a business process that generates multiple debits and credits resulting from single transactions to produce standard, supplemental accounting entries.

**equitization** In PeopleSoft General Ledger, a business process that enables parent companies to calculate the net income of subsidiaries on a monthly basis and adjust that amount to increase the investment amount and equity income amount before performing consolidations.

**event** A predefined point either in the Component Processor flow or in the program flow. As each point is encountered, the event activates each component, triggering any PeopleCode program that is associated with that component and that event. Examples of events are FieldChange, SavePreChange, and RowDelete.

In PeopleSoft Human Resources, also refers to an incident that affects benefits eligibility.

**event propagation process** In PeopleSoft Sales Incentive Management, a process that determines, through logic, the propagation of an original PeopleSoft Enterprise Incentive Management event and creates a derivative (duplicate) of the original event to be processed by other objects.

| | |
|---|---|
| | Sales Incentive Management uses this mechanism to implement splits, roll-ups, and so on. Event propagation determines who receives the credit. |
| **exception** | In PeopleSoft Receivables, an item that either is a deduction or is in dispute. |
| **exclusive pricing** | In PeopleSoft Order Management, a type of arbitration plan that is associated with a price rule. Exclusive pricing is used to price sales order transactions. |
| **fact** | In PeopleSoft applications, facts are numeric data values from fields from a source database as well as an analytic application. A fact can be anything you want to measure your business by, for example, revenue, actual, budget data, or sales numbers. A fact is stored on a fact table. |
| **forecast item** | A logical entity with a unique set of descriptive demand and forecast data that is used as the basis to forecast demand. You create forecast items for a wide range of uses, but they ultimately represent things that you buy, sell, or use in your organization and for which you require a predictable usage. |
| **fund** | In PeopleSoft Promotions Management, a budget that can be used to fund promotional activity. There are four funding methods: top down, fixed accrual, rolling accrual, and zero-based accrual. |
| **generic process type** | In PeopleSoft Process Scheduler, process types are identified by a generic process type. For example, the generic process type SQR includes all SQR process types, such as SQR process and SQR report. |
| **group** | In PeopleSoft Billing and Receivables, a posting entity that comprises one or more transactions (items, deposits, payments, transfers, matches, or write-offs).<br><br>In PeopleSoft Human Resources Management and Supply Chain Management, any set of records that are associated under a single name or variable to run calculations in PeopleSoft business processes. In PeopleSoft Time and Labor, for example, employees are placed in groups for time reporting purposes. |
| **incentive object** | In PeopleSoft Enterprise Incentive Management, the incentive-related objects that define and support the PeopleSoft Enterprise Incentive Management calculation process and results, such as plan templates, plans, results data, user interaction objects, and so on. |
| **incentive rule** | In PeopleSoft Sales Incentive Management, the commands that act on transactions and turn them into compensation. A rule is one part in the process of turning a transaction into compensation. |
| **incur** | In PeopleSoft Promotions Management, to become liable for a promotional payment. In other words, you owe that amount to a customer for promotional activities. |
| **item** | In PeopleSoft Inventory, a tangible commodity that is stored in a business unit (shipped from a warehouse).<br><br>In PeopleSoft Demand Planning, Inventory Policy Planning, and Supply Planning, a noninventory item that is designated as being used for planning purposes only. It can represent a family or group of inventory items. It can have a planning bill of material (BOM) or planning routing, and it can exist as a component on a planning BOM. A planning item cannot be specified on a production or engineering BOM or routing, and it cannot be used as a component in a production. The quantity on hand will never be maintained.<br><br>In PeopleSoft Receivables, an individual receivable. An item can be an invoice, a credit memo, a debit memo, a write-off, or an adjustment. |
| **KPI** | An abbreviation for *key performance indicator.* A high-level measurement of how well an organization is doing in achieving critical success factors. This defines the data value or calculation upon which an assessment is determined. |

**LDIF file** Abbreviation for *Lightweight Directory Access Protocol (LDAP) Data Interchange Format file.* Contains discrepancies between PeopleSoft data and directory data.

**learner group** In PeopleSoft Enterprise Learning Management, a group of learners who are linked to the same learning environment. Members of the learner group can share the same attributes, such as the same department or job code. Learner groups are used to control access to and enrollment in learning activities and programs. They are also used to perform group enrollments and mass enrollments in the back office.

**learning components** In PeopleSoft Enterprise Learning Management, the foundational building blocks of learning activities. PeopleSoft Enterprise Learning Management supports six basic types of learning components: web-based, session, webcast, test, survey, and assignment. One or more of these learning component types compose a single learning activity.

**learning environment** In PeopleSoft Enterprise Learning Management, identifies a set of categories and catalog items that can be made available to learner groups. Also defines the default values that are assigned to the learning activities and programs that are created within a particular learning environment. Learning environments provide a way to partition the catalog so that learners see only those items that are relevant to them.

**learning history** In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's completed learning activities and programs.

**ledger mapping** You use ledger mapping to relate expense data from general ledger accounts to resource objects. Multiple ledger line items can be mapped to one or more resource IDs. You can also use ledger mapping to map dollar amounts (referred to as *rates*) to business units. You can map the amounts in two different ways: an actual amount that represents actual costs of the accounting period, or a budgeted amount that can be used to calculate the capacity rates as well as budgeted model results. In PeopleSoft Enterprise Warehouse, you can map general ledger accounts to the EW Ledger table.

**library section** In PeopleSoft Enterprise Incentive Management, a section that is defined in a plan (or template) and that is available for other plans to share. Changes to a library section are reflected in all plans that use it.

**linked section** In PeopleSoft Enterprise Incentive Management, a section that is defined in a plan template but appears in a plan. Changes to linked sections propagate to plans using that section.

**linked variable** In PeopleSoft Enterprise Incentive Management, a variable that is defined and maintained in a plan template and that also appears in a plan. Changes to linked variables propagate to plans using that variable.

**load** In PeopleSoft Inventory, identifies a group of goods that are shipped together. Load management is a feature of PeopleSoft Inventory that is used to track the weight, the volume, and the destination of a shipment.

**local functionality** In PeopleSoft HRMS, the set of information that is available for a specific country. You can access this information when you click the appropriate country flag in the global window, or when you access it by a local country menu.

**location** Locations enable you to indicate the different types of addresses—for a company, for example, one address to receive bills, another for shipping, a third for postal deliveries, and a separate street address. Each address has a different location number. The primary location—indicated by a *1*—is the address you use most often and may be different from the main address.

**logistical task** In PeopleSoft Services Procurement, an administrative task that is related to hiring a service provider. Logistical tasks are linked to the service type on the work order so that different types of services can have different logistical tasks. Logistical tasks include both preapproval tasks (such as assigning a new badge or ordering a new

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| | laptop) and postapproval tasks (such as scheduling orientation or setting up the service provider email). The logistical tasks can be mandatory or optional. Mandatory preapproval tasks must be completed before the work order is approved. Mandatory postapproval tasks, on the other hand, must be completed before a work order is released to a service provider. |
| **market template** | In PeopleSoft Enterprise Incentive Management, additional functionality that is specific to a given market or industry and is built on top of a product category. |
| **match group** | In PeopleSoft Receivables, a group of receivables items and matching offset items. The system creates match groups by using user-defined matching criteria for selected field values. |
| **MCF server** | Abbreviation for *PeopleSoft MultiChannel Framework server.* Comprises the universal queue server and the MCF log server. Both processes are started when *MCF Servers* is selected in an application server domain configuration. |
| **merchandising activity** | In PeopleSoft Promotions Management, a specific discount type that is associated with a trade promotion (such as off-invoice, billback or rebate, or lump-sum payment) that defines the performance that is required to receive the discount. In the industry, you may know this as an offer, a discount, a merchandising event, an event, or a tactic. |
| **meta-SQL** | Meta-SQL constructs expand into platform-specific Structured Query Language (SQL) substrings. They are used in functions that pass SQL strings, such as in SQL objects, the SQLExec function, and PeopleSoft Application Engine programs. |
| **metastring** | Metastrings are special expressions included in SQL string literals. The metastrings, prefixed with a percent (%) symbol, are included directly in the string literals. They expand at run time into an appropriate substring for the current database platform. |
| **multibook** | In PeopleSoft General Ledger, multiple ledgers having multiple-base currencies that are defined for a business unit, with the option to post a single transaction to all base currencies (all ledgers) or to only one of those base currencies (ledgers). |
| **multicurrency** | The ability to process transactions in a currency other than the business unit's base currency. |
| **national allowance** | In PeopleSoft Promotions Management, a promotion at the corporate level that is funded by nondiscretionary dollars. In the industry, you may know this as a national promotion, a corporate promotion, or a corporate discount. |
| **node-oriented tree** | A tree that is based on a detail structure, but the detail values are not used. |
| **pagelet** | Each block of content on the home page is called a pagelet. These pagelets display summary information within a small rectangular area on the page. The pagelet provide users with a snapshot of their most relevant PeopleSoft and non-PeopleSoft content. |
| **participant** | In PeopleSoft Enterprise Incentive Management, participants are recipients of the incentive compensation calculation process. |
| **participant object** | Each participant object may be related to one or more compensation objects.<br>See also *compensation object.* |
| **partner** | A company that supplies products or services that are resold or purchased by the enterprise. |
| **pay cycle** | In PeopleSoft Payables, a set of rules that define the criteria by which it should select scheduled payments for payment creation. |
| **pending item** | In PeopleSoft Receivables, an individual receivable (such as an invoice, a credit memo, or a write-off) that has been entered in or created by the system, but hasn't been posted. |

**PeopleCode** PeopleCode is a proprietary language, executed by the PeopleSoft application processor. PeopleCode generates results based upon existing data or user actions. By using business interlink objects, external services are available to all PeopleSoft applications wherever PeopleCode can be executed.

**PeopleCode event** An action that a user takes upon an object, usually a record field, that is referenced within a PeopleSoft page.

**PeopleSoft Internet Architecture** The fundamental architecture on which PeopleSoft 8 applications are constructed, consisting of a relational database management system (RDBMS), an application server, a web server, and a browser.

**performance measurement** In PeopleSoft Enterprise Incentive Management, a variable used to store data (similar to an aggregator, but without a predefined formula) within the scope of an incentive plan. Performance measures are associated with a plan calendar, territory, and participant. Performance measurements are used for quota calculation and reporting.

**period context** In PeopleSoft Enterprise Incentive Management, because a participant typically uses the same compensation plan for multiple periods, the period context associates a plan context with a specific calendar period and fiscal year. The period context references the associated plan context, thus forming a chain. Each plan context has a corresponding set of period contexts.

**plan** In PeopleSoft Sales Incentive Management, a collection of allocation rules, variables, steps, sections, and incentive rules that instruct the PeopleSoft Enterprise Incentive Management engine in how to process transactions.

**plan context** In PeopleSoft Enterprise Incentive Management, correlates a participant with the compensation plan and node to which the participant is assigned, enabling the PeopleSoft Enterprise Incentive Management system to find anything that is associated with the node and that is required to perform compensation processing. Each participant, node, and plan combination represents a unique plan context—if three participants are on a compensation structure, each has a different plan context. Configuration plans are identified by plan contexts and are associated with the participants that refer to them.

**plan template** In PeopleSoft Enterprise Incentive Management, the base from which a plan is created. A plan template contains common sections and variables that are inherited by all plans that are created from the template. A template may contain steps and sections that are not visible in the plan definition.

**planned learning** In PeopleSoft Enterprise Learning Management, a self-service repository for all of a learner's planned learning activities and programs.

**planning instance** In PeopleSoft Supply Planning, a set of data (business units, items, supplies, and demands) constituting the inputs and outputs of a supply plan.

**portal registry** In PeopleSoft applications, the portal registry is a tree-like structure in which content references are organized, classified, and registered. It is a central repository that defines both the structure and content of a portal through a hierarchical, tree-like structure of folders useful for organizing and securing content references.

**price list** In PeopleSoft Enterprise Pricer, enables you to select products and conditions for which the price list applies to a transaction. During a transaction, the system either determines the product price based on the predefined search hierarchy for the transaction or uses the product's lowest price on any associated, active price lists. This price is used as the basis for any further discounts and surcharges.

**price rule** In PeopleSoft Enterprise Pricer, defines the conditions that must be met for adjustments to be applied to the base price. Multiple rules can apply when conditions of each rule are met.

**price rule condition** In PeopleSoft Enterprise Pricer, selects the price-by fields, the values for the price-by fields, and the operator that determines how the price-by fields are related to the transaction.

**price rule key** In PeopleSoft Enterprise Pricer, defines the fields that are available to define price rule conditions (which are used to match a transaction) on the price rule.

**process category** In PeopleSoft Process Scheduler, processes that are grouped for server load balancing and prioritization.

**process group** In PeopleSoft Financials, a group of application processes (performed in a defined order) that users can initiate in real time, directly from a transaction entry page.

**process definition** Process definitions define each run request.

**process instance** A unique number that identifies each process request. This value is automatically incremented and assigned to each requested process when the process is submitted to run.

**process job** You can link process definitions into a job request and process each request serially or in parallel. You can also initiate subsequent processes based on the return code from each prior request.

**process request** A single run request, such as a Structured Query Report (SQR), a COBOL or Application Engine program, or a Crystal report that you run through PeopleSoft Process Scheduler.

**process run control** A PeopleTools variable used to retain PeopleSoft Process Scheduler values needed at runtime for all requests that reference a run control ID. Do not confuse these with application run controls, which may be defined with the same run control ID, but only contain information specific to a given application process request.

**product category** In PeopleSoft Enterprise Incentive Management, indicates an application in the Enterprise Incentive Management suite of products. Each transaction in the PeopleSoft Enterprise Incentive Management system is associated with a product category.

**programs** In PeopleSoft Enterprise Learning Management, a high-level grouping that guides the learner along a specific learning path through sections of catalog items. PeopleSoft Enterprise Learning Systems provides two types of programs—curricula and certifications.

**progress log** In PeopleSoft Services Procurement, tracks deliverable-based projects. This is similar to the time sheet in function and process. The service provider contact uses the progress log to record and submit progress on deliverables. The progress can be logged by the activity that is performed, by the percentage of work that is completed, or by the completion of milestone activities that are defined for the project.

**project transaction** In PeopleSoft Project Costing, an individual transaction line that represents a cost, time, budget, or other transaction row.

**promotion** In PeopleSoft Promotions Management, a trade promotion, which is typically funded from trade dollars and used by consumer products manufacturers to increase sales volume.

**publishing** In PeopleSoft Enterprise Incentive Management, a stage in processing that makes incentive-related results available to participants.

**record group** A set of logically and functionally related control tables and views. Record groups help enable TableSet sharing, which eliminates redundant data entry. Record groups ensure that TableSet sharing is applied consistently across all related tables and views.

**record input VAT flag** Abbreviation for *record input value-added tax flag*. Within PeopleSoft Purchasing, Payables, and General Ledger, this flag indicates that you are recording input VAT

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| | on the transaction. This flag, in conjunction with the record output VAT flag, is used to determine the accounting entries created for a transaction and to determine how a transaction is reported on the VAT return. For all cases within Purchasing and Payables where VAT information is tracked on a transaction, this flag is set to Yes. This flag is not used in PeopleSoft Order Management, Billing, or Receivables, where it is assumed that you are always recording only output VAT, or in PeopleSoft Expenses, where it is assumed that you are always recording only input VAT. |
| **record output VAT flag** | Abbreviation for *record output value-added tax flag*.<br><br>See *record input VAT flag*. |
| **reference data** | In PeopleSoft Sales Incentive Management, system objects that represent the sales organization, such as territories, participants, products, customers, channels, and so on. |
| **reference object** | In PeopleSoft Enterprise Incentive Management, this dimension-type object further defines the business. Reference objects can have their own hierarchy (for example, product tree, customer tree, industry tree, and geography tree). |
| **reference transaction** | In commitment control, a reference transaction is a source transaction that is referenced by a higher-level (and usually later) source transaction, in order to automatically reverse all or part of the referenced transaction's budget-checked amount. This avoids duplicate postings during the sequential entry of the transaction at different commitment levels. For example, the amount of an encumbrance transaction (such as a purchase order) will, when checked and recorded against a budget, cause the system to concurrently reference and relieve all or part of the amount of a corresponding pre-encumbrance transaction, such as a purchase requisition. |
| **regional sourcing** | In PeopleSoft Purchasing, provides the infrastructure to maintain, display, and select an appropriate vendor and vendor pricing structure that is based on a regional sourcing model where the multiple ship to locations are grouped. Sourcing may occur at a level higher than the ship to location. |
| **relationship object** | In PeopleSoft Enterprise Incentive Management, these objects further define a compensation structure to resolve transactions by establishing associations between compensation objects and business objects. |
| **remote data source data** | Data that is extracted from a separate database and migrated into the local database. |
| **REN server** | Abbreviation for *real-time event notification server* in PeopleSoft MultiChannel Framework. |
| **requester** | In PeopleSoft eSettlements, an individual who requests goods or services and whose ID appears on the various procurement pages that reference purchase orders. |
| **role** | Describes how people fit into PeopleSoft Workflow. A role is a class of users who perform the same type of work, such as clerks or managers. Your business rules typically specify what user role needs to do an activity. |
| **role user** | A PeopleSoft Workflow user. A person's role user ID serves much the same purpose as a user ID does in other parts of the system. PeopleSoft Workflow uses role user IDs to determine how to route worklist items to users (through an email address, for example) and to track the roles that users play in the workflow. Role users do not need PeopleSoft user IDs. |
| **roll up** | In a tree, to roll up is to total sums based on the information hierarchy. |
| **run control** | A run control is a type of online page that is used to begin a process, such as the batch processing of a payroll run. Run control pages generally start a program that manipulates data. |
| **run control ID** | A unique ID to associate each user with his or her own run control table entries. |

**run-level context** In PeopleSoft Enterprise Incentive Management, associates a particular run (and batch ID) with a period context and plan context. Every plan context that participates in a run has a separate run-level context. Because a run cannot span periods, only one run-level context is associated with each plan context.

**search query** You use this set of objects to pass a query string and operators to the search engine. The search index returns a set of matching results with keys to the source documents.

**section** In PeopleSoft Enterprise Incentive Management, a collection of incentive rules that operate on transactions of a specific type. Sections enable plans to be segmented to process logical events in different sections.

**security event** In commitment control, security events trigger security authorization checking, such as budget entries, transfers, and adjustments; exception overrides and notifications; and inquiries.

**serial genealogy** In PeopleSoft Manufacturing, the ability to track the composition of a specific, serial-controlled item.

**serial in production** In PeopleSoft Manufacturing, enables the tracing of serial information for manufactured items. This is maintained in the Item Master record.

**session** In PeopleSoft Enterprise Learning Management, a single meeting day of an activity (that is, the period of time between start and finish times within a day). The session stores the specific date, location, meeting time, and instructor. Sessions are used for scheduled training.

**session template** In PeopleSoft Enterprise Learning Management, enables you to set up common activity characteristics that may be reused while scheduling a PeopleSoft Enterprise Learning Management activity—characteristics such as days of the week, start and end times, facility and room assignments, instructors, and equipment. A session pattern template can be attached to an activity that is being scheduled. Attaching a template to an activity causes all of the default template information to populate the activity session pattern.

**setup relationship** In PeopleSoft Enterprise Incentive Management, a relationship object type that associates a configuration plan with any structure node.

**share driver expression** In PeopleSoft Business Planning, a named planning method similar to a driver expression, but which you can set up globally for shared use within a single planning application or to be shared between multiple planning applications through PeopleSoft Enterprise Warehouse.

**single signon** With single signon, users can, after being authenticated by a PeopleSoft application server, access a second PeopleSoft application server without entering a user ID or password.

**source transaction** In commitment control, any transaction generated in a PeopleSoft or third-party application that is integrated with commitment control and which can be checked against commitment control budgets. For example, a pre-encumbrance, encumbrance, expenditure, recognized revenue, or collected revenue transaction.

**SpeedChart** A user-defined shorthand key that designates several ChartKeys to be used for voucher entry. Percentages can optionally be related to each ChartKey in a SpeedChart definition.

**SpeedType** A code representing a combination of ChartField values. SpeedTypes simplify the entry of ChartFields commonly used together.

**staging** A method of consolidating selected partner offerings with the offerings from the enterprise's other partners.

**statutory account** Account required by a regulatory authority for recording and reporting financial results. In PeopleSoft, this is equivalent to the Alternate Account (ALTACCT) ChartField.

**step** In PeopleSoft Sales Incentive Management, a collection of sections in a plan. Each step corresponds to a step in the job run.

**storage level** In PeopleSoft Inventory, identifies the level of a material storage location. Material storage locations are made up of a business unit, a storage area, and a storage level. You can set up to four storage levels.

**subcustomer qualifier** A value that groups customers into a division for which you can generate detailed history, aging, events, and profiles.

**Summary ChartField** You use summary ChartFields to create summary ledgers that roll up detail amounts based on specific detail values or on selected tree nodes. When detail values are summarized using tree nodes, summary ChartFields must be used in the summary ledger data record to accommodate the maximum length of a node name (20 characters).

**summary ledger** An accounting feature used primarily in allocations, inquiries, and PS/nVision reporting to store combined account balances from detail ledgers. Summary ledgers increase speed and efficiency of reporting by eliminating the need to summarize detail ledger balances each time a report is requested. Instead, detail balances are summarized in a background process according to user-specified criteria and stored on summary ledgers. The summary ledgers are then accessed directly for reporting.

**summary time period** In PeopleSoft Business Planning, any time period (other than a base time period) that is an aggregate of other time periods, including other summary time periods and base time periods, such as quarter and year total.

**summary tree** A tree used to roll up accounts for each type of report in summary ledgers. Summary trees enable you to define trees on trees. In a summary tree, the detail values are really nodes on a detail tree or another summary tree (known as the *basis* tree). A summary tree structure specifies the details on which the summary trees are to be built.

**syndicate** To distribute a production version of the enterprise catalog to partners.

**system function** In PeopleSoft Receivables, an activity that defines how the system generates accounting entries for the general ledger.

**TableSet** A means of sharing similar sets of values in control tables, where the actual data values are different but the structure of the tables is the same.

**TableSet sharing** Shared data that is stored in many tables that are based on the same TableSets. Tables that use TableSet sharing contain the SETID field as an additional key or unique identifier.

**target currency** The value of the entry currency or currencies converted to a single currency for budget viewing and inquiry purposes.

**template** A template is HTML code associated with a web page. It defines the layout of the page and also where to get HTML for each part of the page. In PeopleSoft, you use templates to build a page by combining HTML from a number of sources. For a PeopleSoft portal, all templates must be registered in the portal registry, and each content reference must be assigned a template.

**territory** In PeopleSoft Sales Incentive Management, hierarchical relationships of business objects, including regions, products, customers, industries, and participants.

**TimeSpan** A relative period, such as year-to-date or current period, that can be used in various PeopleSoft General Ledger functions and reports when a rolling time frame, rather

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| | than a specific date, is required. TimeSpans can also be used with flexible formulas in PeopleSoft Projects. |
| **trace usage** | In PeopleSoft Manufacturing, enables the control of which components will be traced during the manufacturing process. Serial- and lot-controlled components can be traced. This is maintained in the Item Master record. |
| **transaction allocation** | In PeopleSoft Enterprise Incentive Management, the process of identifying the owner of a transaction. When a raw transaction from a batch is allocated to a plan context, the transaction is duplicated in the PeopleSoft Enterprise Incentive Management transaction tables. |
| **transaction state** | In PeopleSoft Enterprise Incentive Management, a value assigned by an incentive rule to a transaction. Transaction states enable sections to process only transactions that are at a specific stage in system processing. After being successfully processed, transactions may be promoted to the next transaction state and "picked up" by a different section for further processing. |
| **Translate table** | A system edit table that stores codes and translate values for the miscellaneous fields in the database that do not warrant individual edit tables of their own. |
| **tree** | The graphical hierarchy in PeopleSoft systems that displays the relationship between all accounting units (for example, corporate divisions, projects, reporting groups, account numbers) and determines roll-up hierarchies. |
| **unclaimed transaction** | In PeopleSoft Enterprise Incentive Management, a transaction that is not claimed by a node or participant after the allocation process has completed, usually due to missing or incomplete data. Unclaimed transactions may be manually assigned to the appropriate node or participant by a compensation administrator. |
| **universal navigation header** | Every PeopleSoft portal includes the universal navigation header, intended to appear at the top of every page as long as the user is signed on to the portal. In addition to providing access to the standard navigation buttons (like Home, Favorites, and signoff) the universal navigation header can also display a welcome message for each user. |
| **user interaction object** | In PeopleSoft Sales Incentive Management, used to define the reporting components and reports that a participant can access in his or her context. All Sales Incentive Management user interface objects and reports are registered as user interaction objects. User interaction objects can be linked to a compensation structure node through a compensation relationship object (individually or as groups). |
| **variable** | In PeopleSoft Sales Incentive Management, the intermediate results of calculations. Variables hold the calculation results and are then inputs to other calculations. Variables can be plan variables that persist beyond the run of an engine or local variables that exist only during the processing of a section. |
| **VAT exception** | Abbreviation for *value-added tax exception.* A temporary or permanent exemption from paying VAT that is granted to an organization. This terms refers to both VAT exoneration and VAT suspension. |
| **VAT exempt** | Abbreviation for *value-added tax exempt.* Describes goods and services that are not subject to VAT. Organizations that supply exempt goods or services are unable to recover the related input VAT. This is also referred to as exempt without recovery. |
| **VAT exoneration** | Abbreviation for *value-added tax exoneration.* An organization that has been granted a permanent exemption from paying VAT due to the nature of that organization. |
| **VAT suspension** | Abbreviation for *value-added tax suspension.* An organization that has been granted a temporary exemption from paying VAT. |
| **warehouse** | A PeopleSoft data warehouse that consists of predefined ETL maps, data warehouse tools, and DataMart definitions. |

**work order** In PeopleSoft Services Procurement, enables an enterprise to create resource-based and deliverable-based transactions that specify the basic terms and conditions for hiring a specific service provider. When a service provider is hired, the service provider logs time or progress against the work order.

**worksheet** A way of presenting data through a PeopleSoft Business Analysis Modeler interface that enables users to do in-depth analysis using pivoting tables, charts, notes, and history information.

**worklist** The automated to-do list that PeopleSoft Workflow creates. From the worklist, you can directly access the pages you need to perform the next action, and then return to the worklist for another item.

**XML schema** An XML definition that standardizes the representation of application messages, component interfaces, or business interlinks.

**yield by operation** In PeopleSoft Manufacturing, the ability to plan the loss of a manufactured item on an operation-by-operation basis.

**zero-rated VAT** Abbreviation for *zero-rated value-added tax.* A VAT transaction with a VAT code that has a tax percent of zero. Used to track taxable VAT activity where no actual VAT amount is charged. Organizations that supply zero-rated goods and services can still recover the related input VAT. This is also referred to as exempt with recovery.

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