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PeopleTools 8.52: PeopleSoft Application Designer Lifecycle Management Guide

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PeopleTools 8.52: PeopleSoft Application Designer Lifecycle Management Guide
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PeopleSoft Application Designer Lifecycle Management Guide Preface

This preface describes the Application Designer Life Cycle Management Guide.

Understanding Lifecycle Management

Application Designer provides many features used during maintenance and lifecycle management of your PeopleSoft system. This includes upgrades, software updates, copying projects between databases, comparing databases, merging definitions, and so on. This book describes these features.

See Also

PeopleTools 8.52 PeopleBook: PeopleSoft Change Assistant

PeopleBooks and the PeopleSoft Online Library

A companion PeopleBook called *PeopleBooks and the PeopleSoft Online Library* contains general information, including:

- Understanding the PeopleSoft online library and related documentation.

- How to send PeopleSoft documentation comments and suggestions to Oracle.

- How to access hosted PeopleBooks, downloadable HTML PeopleBooks, and downloadable PDF PeopleBooks as well as documentation updates.

- Understanding PeopleBook structure.

- Typographical conventions and visual cues used in PeopleBooks.

- ISO country codes and currency codes.

- PeopleBooks that are common across multiple applications.

- Common elements used in PeopleBooks.

- Navigating the PeopleBooks interface and searching the PeopleSoft online library.

- Displaying and printing screen shots and graphics in PeopleBooks.

- How to manage the locally installed PeopleSoft online library, including web site folders.

- Understanding documentation integration and how to integrate customized documentation into the library.

- Application abbreviations found in application fields.

You can find *PeopleBooks and the PeopleSoft Online Library* in the online PeopleBooks Library for your PeopleTools release.

Chapter 1

Getting Started with Application Designer's Lifecycle Management Features

Before you begin using the Application Designer lifecycle management features, consider the topics in this section.

PeopleSoft Application Designer Implementation

Before you can begin using PeopleSoft Application Designer, the following items must be in place.

Activity	Description
Set up security.	For developing and customizing PeopleSoft applications you will need access to the definitions involved, such as fields, records, pages, and so on. Your administrator can provide access by adjusting your definition security settings. There are also general PeopleTools permissions for maintaining and upgrading data that your administrator may need to provide access to as well. These include Build and Data Administration, Change Control, and Upgrade. See *PeopleTools 8.52: Security Administration*, "Setting Up Permission Lists," Setting PeopleTools Permissions. See *PeopleTools 8.52: Security Administration*, "Implementing Definition Security."
Set up workstations.	PeopleSoft Application Designer is a windows-based program. To run PeopleSoft Application Designer, you need to have a supported version of Windows with ample CPU and memory resources, and you need to have the workstation configured using PeopleSoft Configuration Manager so that there is connectivity to the appropriate database and all required environment variables are set. See *PeopleTools 8.52: System and Server Administration*, "Using PeopleSoft Configuration Manager," Setting Up the PeopleTools Development Environment.

Other Sources of Information

This section provides information to consider before you begin to use PeopleSoft Application Designer. In addition to implementation considerations presented in this section, take advantage of all PeopleSoft sources of information, including the installation guides, release notes, PeopleBooks, and training courses.

See Also

PeopleTools 8.52 PeopleBook: Getting Started with PeopleTools

PeopleTools 8.52 PeopleBook: PeopleSoft Change Assistant

PeopleTools 8.52 PeopleBook: PeopleSoft Change Impact Analyzer

Chapter 2

Upgrading with PeopleSoft Application Designer

This chapter provides an overview of a PeopleSoft application upgrade and discusses how to:

* Use the upgrade workspace.

* Prepare projects for an upgrade.

* View upgrade messages.

Understanding a PeopleSoft Upgrade

This section discusses:

* PeopleSoft Application Designer upgrade features.

* Definition types that you can upgrade.

PeopleSoft Application Designer Upgrade Features

PeopleSoft Application Designer streamlines the migration of database definitions—such as records, pages, projects, and PeopleCode—from one PeopleSoft database to another. You can perform a complete database upgrade or you can upgrade only the definitions included in a particular project. This chapter focuses mainly on project upgrades, and the PeopleSoft upgrade documentation focuses on complete database upgrades, which are typically performed when upgrading from one version of a PeopleSoft application to another.

While this chapter does not discuss the specific procedures for an enterprise-wide upgrade for a specific platform, there are basic steps to perform in PeopleSoft Application Designer regardless of the type of upgrade, which include:

* Updating your PeopleSoft software.

* Identifying the source and target database. The source can be a file, a project, or an entire database.

* Comparing the source and target database to determine changed definitions.

* Copy any new or changed definitions into your database and adjust all your system components—such as application data, SQL tables, indexes, views, and so on—accordingly.

Updating the PeopleSoft software is covered in the installation documentation for PeopleTools and PeopleSoft applications. This chapter focuses on comparing your source with your target and copying the definitions from the source to the target.

When comparing your source and target you can view results in the upgrade workspace, in reports, in your browser, and side-by-side (for pages and text definitions, such as PeopleCode). When copying definitions into the target database you can use the PeopleSoft Application Designer interface or a command line interface. For text definitions you can use the merge feature.

Note. The complexity of these tasks performed depends on the type of upgrade you are performing. For example, if you are copying brand new definitions from a small project into a source database this is a relatively uncomplicated task, as comparisons are not required and you can immediately begin a copy. However, if you are upgrading an entire database or a large project containing numerous changed definitions it is likely that the compare, merge, or copy process will require more analysis.

Note. To use the PeopleSoft Application Designer upgrade features, you must have full access to projects and upgrade access in the target database. To run a compare you only need read-only upgrade access.

See Also

PeopleTools 8.52: Security Administration, "Setting Up Permission Lists," Setting PeopleTools Permissions

The upgrade documentation for your application and platform.

Definition Types That You Can Upgrade

PeopleTools managed objects can be compared and can be copied to a file or to database, with the exception of those in the following list.

These definitions can be copied to database, but cannot be compared and cannot be copied to file:

- Message catalog entries

- Trees

- Access groups

- Roles

- Dimensions

- Cube definitions

- Cube instance definitions

Note. Certain definition types that are specified as compare and copy or copy only (for example, Cube Dimensions) do not appear on the Development tab because you cannot edit them in PeopleSoft Application Designer.

Note. PeopleSoft delivered definition types (such as pages, Application Engine programs, iScript PeopleCode, and so on) cannot be copied across product lines. For example, you cannot copy a definition from PeopleSoft Human Capital Management to PeopleSoft Customer Relationship Management. License codes for these definitions are specific to the product line in which the definition is delivered. If a PeopleSoft delivered definition is copied to a different product line, it may be inaccessible on the target database.

Using the Upgrade Workspace

This section discusses:

• Switching to the upgrade view.

• Viewing upgrade attributes by definition type.

• Working with upgrade definition columns.

• Using the upgrade menu actions.

• Setting upgrade options.

Switching to the Upgrade View

When you perform an upgrade with PeopleSoft Application Designer, select the Upgrade tab at the bottom of the project workspace to switch to the upgrade view.

The upgrade view of the project workspace shows all of the definition types in the project that are available for upgrade—not only those that PeopleSoft Application Designer can modify, as in the development view. The upgrade definition window displays the definitions in the project and their upgrade settings. One definition type appears at a time.

Displayed here are the upgrade attributes for all record definitions in the selected project:

	Records Key						
	Record Name	Field Name	Source	Target	Action	Upgrade	Done
1	ACCESS_GRP_LANG		Unknown	Unknown	Copy	☑	☐
2	ACCESS_GRP_TBL		Unknown	Unknown	Copy	☑	☐
3	ACCESS_GRP_WRK		Unknown	Unknown	Copy	☑	☐
4	ACLCOMPCREF_VW		Unknown	Unknown	Copy	☑	☐
5	ACLCOMPONENT_V2		Unknown	Unknown	Copy	☑	☐
6	ACL_PAGES_VW2		Unknown	Unknown	Copy	☑	☐
7	ACTIONAME_VW		Unknown	Unknown	Copy	☑	☐
8	AEAPPL_AUX		Unknown	Unknown	Copy	☑	☐
9	AEAPPL_LNG_VW		Unknown	Unknown	Copy	☑	☐
10	AEAPPL_VW		Unknown	Unknown	Copy	☑	☐
11	AECOBOLPARM		Unknown	Unknown	Delete	☑	☐
12	AEDAEMONMGR_AET		Unknown	Unknown	Copy	☑	☐
13	AEONLINEINST		Unknown	Unknown	Copy	☑	☐
14	AEREQUESTPARM		Unknown	Unknown	Copy	☑	☐
15	AETEMPTBLMGR		Unknown	Unknown	Copy	☑	☐
16	AE_DAEMON_PGM_V		Unknown	Unknown	Copy	☑	☐
17	AE_DERIVED		Unknown	Unknown	Copy	☑	☐
18	AE_PTTSRPLC_AET		Unknown	Unknown	Copy	☑	☐
19	AE_PTTSUNDO_AET		Unknown	Unknown	Copy	☑	☐
20	AE_REQUEST		Unknown	Unknown	Copy	☑	☐
21	AE_REQUEST_OPT		Unknown	Unknown	Copy	☑	☐
22	AE_SYNCGEN_AET		Unknown	Unknown	Copy	☑	☐
23	AE_TEMPLOCK2_VW		Unknown	Unknown	Copy	☑	☐

Records (Upgrade Definition Type)

Viewing Upgrade Attributes by Definition Type

To view the upgrade attributes by definition type in a project:

1. Open a project.

2. Select the Upgrade tab at the bottom of the project workspace.

3. Double-click a folder to open the upgrade definition window.

    With the exception of PeopleCode, the folders in the upgrade view are not expandable. The upgrade definition window contains a grid with definitions in the project that are of the selected type. For example, if you double-click the Records folder in the upgrade view, the upgrade definition window displays the records in the project.

    You can view only one upgrade definition window—and one definition type—at a time. When you double-click another definition type in the upgrade view, the upgrade definition window is refreshed with the new definitions of that type.

    Note. You can filter which definitions are displayed in this window. By default, no filtering is applied.

Working with Upgrade Definition Columns

The columns in the upgrade definition window display various information about each definition.

Key   Displays the name of the definition, plus any other key values. The number and titles of the key columns vary, depending on the definition type.

Source   Displays the definition status in the source (current) database.

Target   Displays the definition target database status.

Action   Displays the action that is performed if the definition is copied into the target database.

Upgrade   Select to upgrade the definition during a copy.

Done   Is selected when the definition has been copied. You can't select Done check boxes yourself—PeopleSoft Application Designer does this after a copy—but you can *clear* them. Only definitions that have Upgrade selected and Done cleared are copied during an upgrade.

Execute   Only applies to file references and Application Engine definitions. Allows file references and Application Engine definitions to be executed when applying a change package.

The key columns on the left-hand side of the grid are frozen; they do not scroll horizontally. When you use the horizontal scroll bar, only the upgrade columns scroll, enabling you to see the key information about the definitions at all times. The various definition types have different numbers of key columns. For example, fields have only one column (Field Name), while translates have four (Field Name,Field Value,Language Code, and Effective Date).

When viewing definition types with a large nonscrolling region, the horizontal scroll bar is disabled unless at least one scrolling column is displayed.

To enlarge the window enough so that you can scroll through the upgrade columns:

*   Maximize the upgrade definition window.

*   Maximize PeopleSoft Application Designer.

*   Hide the project workspace.

To display *all* of the grid columns at one time when the preceding options don't enable you to see every column, use the zooming commands in the View menu. With each Zoom Out command, the grid size is reduced. To restore the normal view, select 100%.

You can also resize individual columns by dragging the column border to the appropriate size. If you resize the upgrade columns, save the sizing and use it for every project. Custom key column sizing is not preserved after you close a project; these columns reset to their default size.

Using Upgrade Menu Actions

To access the pop-up upgrade menu, right-click anywhere in the grid in the upgrade definition window.

This table describes the upgrade menu actions and the actions they perform:

Menu Item	Action
View Definition	Opens multiple definitions in the upgrade grid.
View PeopleCode	Opens the PeopleCode Editor. This is enabled for PeopleCode definition types.
Find Definition References	Finds all references to the selected definition.
Merge Definition	Enables you to compare and merge text definitions between two sources, either a file or another database. Text definitions are PeopleCode, SQL, XSLT, and HTML.
Diff / Merge Page	Enables you to compare (side-by-side) page definitions between two sources, either a file or another database, and merge the definitions.
Filtering	Opens a cascading menu with filtering options that you can apply to the upgrade grid. These same options are also in the View menu.
Refresh View	Updates the information in the upgrade definition window.
Set Action	Enables you to select and tag definitions for copying and deleting.
Set Action for Project	Enables you to select and tag all definitions in a project for copy or delete.
Tag for Upgrade	Enables you to tag a group of definitions for upgrade.
Untag for Upgrade	Enables you to remove the tag on a group of definitions for upgrade.
Reset Done Flag	Enables you to reset Done check boxes for a group of definitions.
Reset Project Done Flags	Enables you to reset all Done check boxes.
Insert Definitions into Project	Opens the Insert Definitions into Project dialog box.

Menu Item	Action
Remove from Project	Removes the selected definitions from the current project. You can also use the Delete key.
Project Properties	Opens the Project Properties dialog box, in which you define properties for the project, like description.

Setting Upgrade Options

This section discusses how to:

- Access the upgrade options.

- Set general options.

- Set compare options.

- Set report options.

- Set report filter options.

- Set copy options.

Accessing the Upgrade Options

To access the upgrade options:

1. Select Tools, Compare and Report.

2. Sign in to an upgrade target database.

3. On the Compare and Report dialog box, click Options, and select the appropriate upgrade option tab.

Preserving Project Item Status

Access the Compare and Report dialog box and view the Project Item Status/Child Definitions group box.

Setting General Options

Access the Upgrade Options dialog box and select the General Options tab.
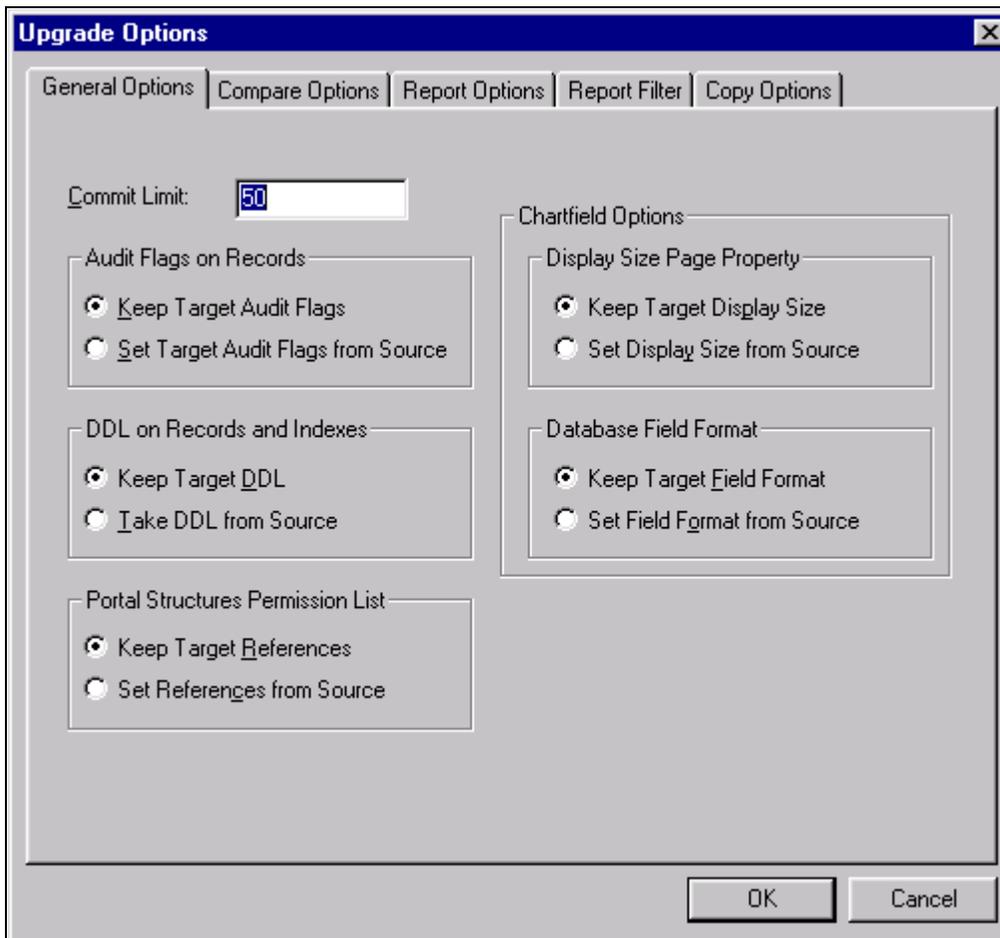
Upgrade Options dialog box: General Options tab

Use the Upgrade Options dialog box to set general options for the Compare or Copy process.

Commit Limit	Set the commit limit.
	Start with the default of *50.* If the Copy process seems slow and there is sufficient log file space, try increasing the commit limit. You can modify the initial project default commit limit on the PeopleTools Options page.
	Very large commit limits, however, can cause more work if something goes wrong during the copy. For example, if the commit limit is set to *1,000* and the Copy process stalls on the 999th definition, none of the previous definitions are copied. The Copy process must be performed again.
Audit Flags on Records	Select one:
	• Keep Target Audit Flags: Select to preserve all of the enabled target flags. This is the default. Audit flags that are enabled in the source are also retained. Differences between the source and target audit flags are not shown on the compare report.
	• Set Target Audit Flags from Source: Select to copy audit flag settings from the source to the target database.

DDL on Records and Indexes   Select one:

- Keep Target DDL: Select to preserve the target DDLs. This is the default. Differences between the source and target DDL are not shown on the compare report.

- Take DDL from Source: Select to copy the DDL from the source to the target database.

Portal Structures Permission List   Select one:

- Keep Target References: Select to preserve the target portal structures permission list references. This is the default.

- Set References from Source: Select to copy the portal structures permission list references from the source to the target database.

Chartfield Options   Set the Display Size Page Property:

- Keep Target Display Size: Does not copy any display changes to a ChartField on the source database (the target values are saved). If this is set for a Compare process, no differences between the source and target in the named fields are displayed. If the only differences on the page are the ChartField display properties, then the page compares as the same for both.

- Set Display Size from Source: Copies the position, as well as the size and type attributes, from the source to the target database.

  Set the Database Field Format:

- Keep Target Field Format: Does not copy any changes to the field format values for a database field that is a ChartField on the source database, and preserves the target field format values. If this is set for a Compare process, any changes to the ChartField field format attributes are not displayed. If these attributes are the only changes for a field, then the definition compares as the same for both.

- Set Field Format from Source: Copies the ChartField field format attributes from the source to the target database.

Setting Compare Options

Access the Upgrade Options dialog box and select the Compare Options tab.
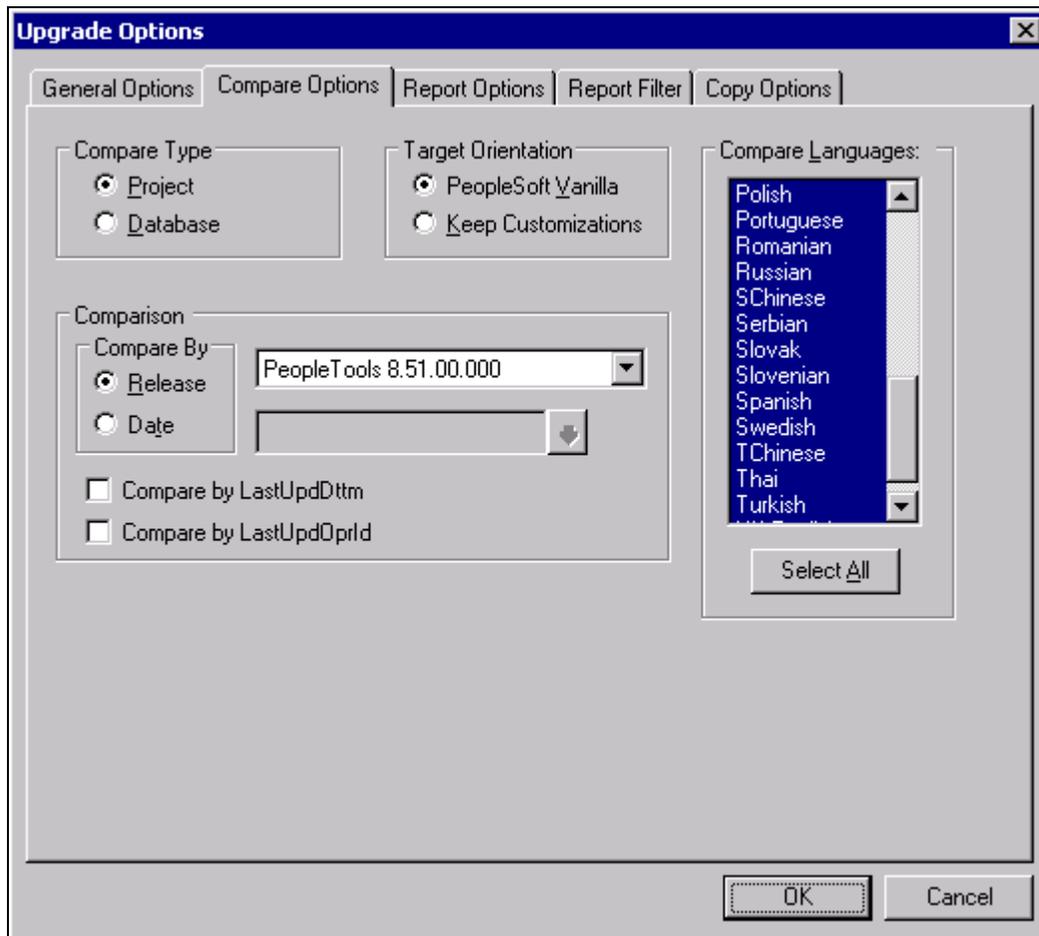
Upgrade Options dialog box: Compare Options tab

Compare Type	Select Project to compare only the definitions of the specified definition type in the current project. The contents of the project do not change.
	Select Database to compare all definitions of the specified definition type. If you select Database, the contents of the current project are deleted and replaced with definitions that are found during the comparison.
Target Orientation	Determines how the Upgrade check boxes in the upgrade definition window are set for definitions that were last modified by the customer in one database and last modified by PeopleSoft in the other database.

Comparison	Select Release to compare databases by the highest release that the two databases have in common. Use the drop-down list box to select from lower common releases. The Compare process labels definitions as Changed or Custom/Changed if they have been changed since the date and time stamp for that release level. This is the default.
	Select Date to have the Compare process label definitions as Changed or Custom/Changed if they have been modified since the date that you specify.
	Use LastUpdDttm (last update date and time) and LastUpdOprid (last user to update definition) to improve the performance of the compare process for larger compare projects. If these options are selected, Application Designer uses only these values to assess differences between PeopleCode definitions. If it is determined that the LastUpdDttm and/or LastUpdOprid are the same, Application Designer assumes that the rest of the attributes are the same and moves on to the next definition in the project. If it is determined that the PeopleCode definitions are different, Application Designer proceeds to compare all attributes of the definition as normal.
	Note. LastUpdDttm and LastUpdOprid apply only to PeopleCode definitions.
Compare Languages	Select the languages of definitions that you want to compare, and select *COMMON,* which specifies basic definition characteristics and parameters in the architecture that are not language-sensitive. Language options specify label-oriented characteristics of a definition, such as page names, labels, and messages. If you do not select *COMMON,* basic definition characteristics are omitted.
	If you need specific languages and basic definition characteristics, also select *COMMON.* However, to copy only language attributes of a definition, you do not need *COMMON.*
	Clicking Select All is the recommended default. Make sure that the base languages in the source and target databases match.
	Press the Ctrl key and your mouse to clear unwanted languages.

Setting Report Options

Access the Upgrade Options dialog box and select the Report Options tab.
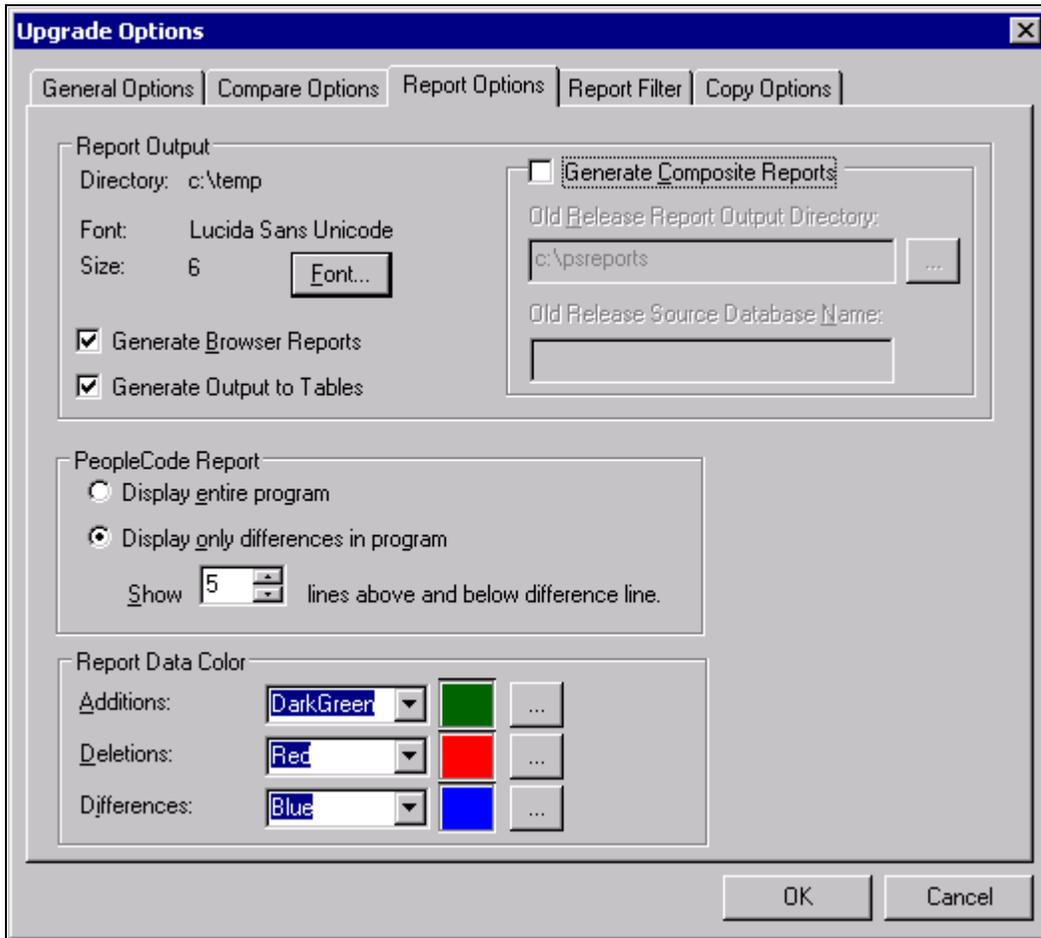
Upgrade Options dialog box: Report Options tab

Report Output
- Directory: Displays the compare report output directory. To change the output directory path, select Tools, Options from the PeopleSoft Application Designer toolbar, and select the General tab.

- Font and Size: Displays the font type and size that will appear in the compare report output. Click Font to select a different font or to change the font size.

- Generate Browser Reports: Select to generate HTML reports that you can view in a browser in addition to the reports that appear in the Application Designer workspace.

  See Chapter 3, "Comparing Source and Target Definitions," Working with Browser Reports, page 32.

- Generate Output to Tables: Select this option to write the compare output to database tables. This enables you to keep a historical record of your compares in your database, and it also provides you the flexibility of being able to design custom queries for analyzing specific definitions, attributes, and so on. The following PeopleTools tables store compare data:

  - PSCOMPDEFN: Contains high-level information related to the compare, such as project name, target database name, source database name, compare release, and so on.

  - PSCOMPITEM: Contains data related to the individual definitions that are being compared, including definition type, definition name, source status, target status, and so on.

  - PSCOMPITEMDATA: Contains specific data for the individual attributes compared.

- Generate Composite Reports: Select to generate a composite report, which is a subset of information showing only the definitions customized at your site that were also modified in the most recent PeopleSoft release.

  - Old Release Report Output Directory: Enter the directory containing the compare reports run on the database for your previous PeopleSoft installation: the database from which you are upgrading.

  - Old Release Source Database Name: Enter the source database name you specified when running the compare reports on your previous PeopleSoft installation. This enables the system to identify the appropriate database definitions listed within the compare reports.

    See Chapter 3, "Comparing Source and Target Definitions," Working with Composite Reports, page 37.

PeopleCode Report	Specify the PeopleCode report options.
	For PeopleCode compare reports, specify whether to show the entire program on the report (the default setting) or only the code differences between the source and target. If you select the latter, you can specify the number of code lines to show above and below the difference for context. The values for the number of lines to show are *0* to *99.* A value of *0* shows only the difference line. A value greater than *0* shows that many lines above and below the difference line.

Note. The PeopleCode report options are global across all projects. Changing settings for one project changes all subsequent PeopleCode compares, regardless of project.

Report Data Color	Select the report data color.
	Use the Browse button to display the standard color dialog box. Choose a color that is not included in the drop-down list box or create a custom color.

- Additions: Select a color for additional data values on the source database. These are also source-only values. The default value is dark green.

- Deletions: Select a color for data values that are deleted from the source database. These are target-only values. The default value is red.

- Differences: Select a color for changed values, which are both source and target values. The default value is blue.

Setting Report Filter Options

Access the Upgrade Options dialog box and select the Report Filter tab.
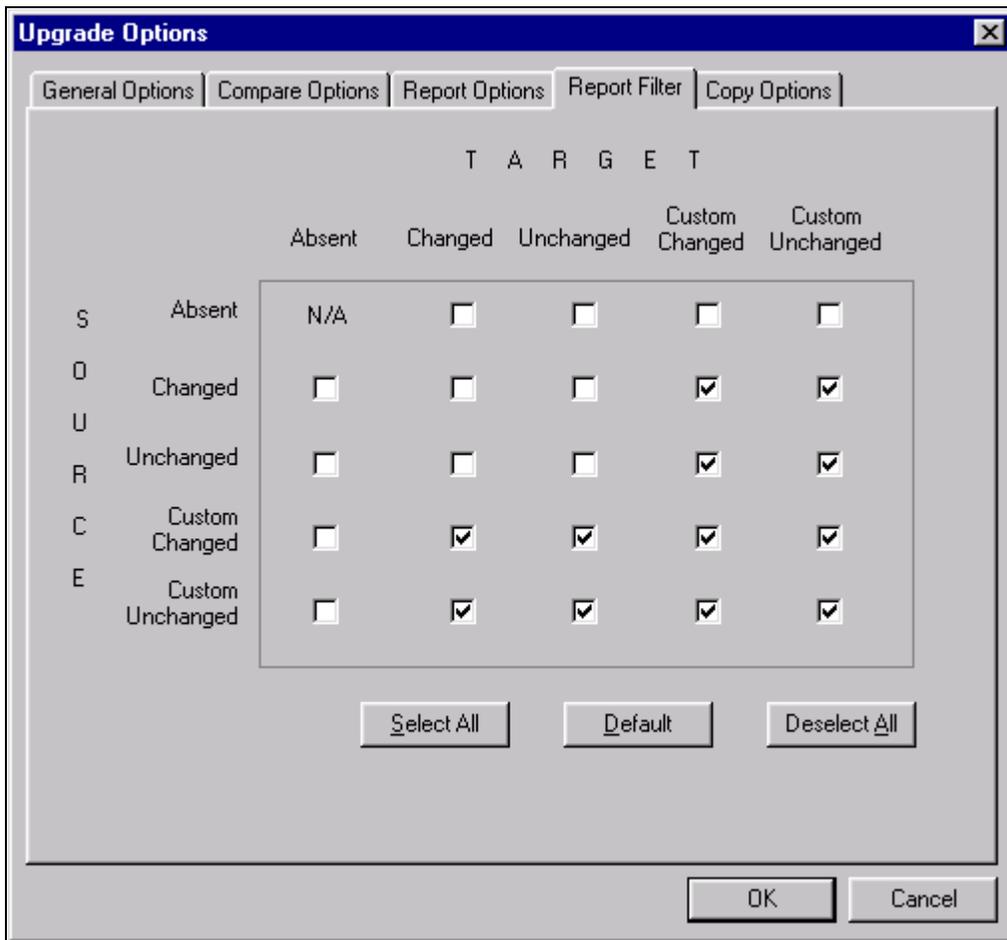
Upgrade Options dialog box: Report Filter tab

When you perform a comparison, the system generates a report for each definition type compared. These reports provide detailed information about how each definition in the source differs from its counterpart in the target.

Before performing a comparison, you can select the definition status combinations with which you generate reports by using report filter options. For example, during an upgrade to a new PeopleSoft release, you might decide that if a definition that was last changed in the target by PeopleSoft is found in the source and it hasn't changed since the last upgrade, you don't need to see information about the definition differences (because you intend to accept the new PeopleSoft version). In this case, you want to filter the compare reports so that a report is not generated if:

• The source is any status.

• The target is unchanged.

Note. Filtering comparison reports does not affect which definitions are added to a project during a database comparison, only which definitions are reported. Definitions that are defined differently in the two databases are always added to the project.

Select the check boxes corresponding to the definition status combinations that you want to report.

Each row in the matrix corresponds to the definition status in the source database. Each column corresponds to the definition status in the target.

The default settings for report filtering show conflicting configured definitions only.

- To reset your selections to the default setting, click the Default button.

- To select all definition status combinations, click the Select All button.

- If you don't want to generate any reports, click the Deselect All button to clear all of the check boxes.

Setting Copy Options

Access the Upgrade Options dialog box and select the Copy Options dialog box.
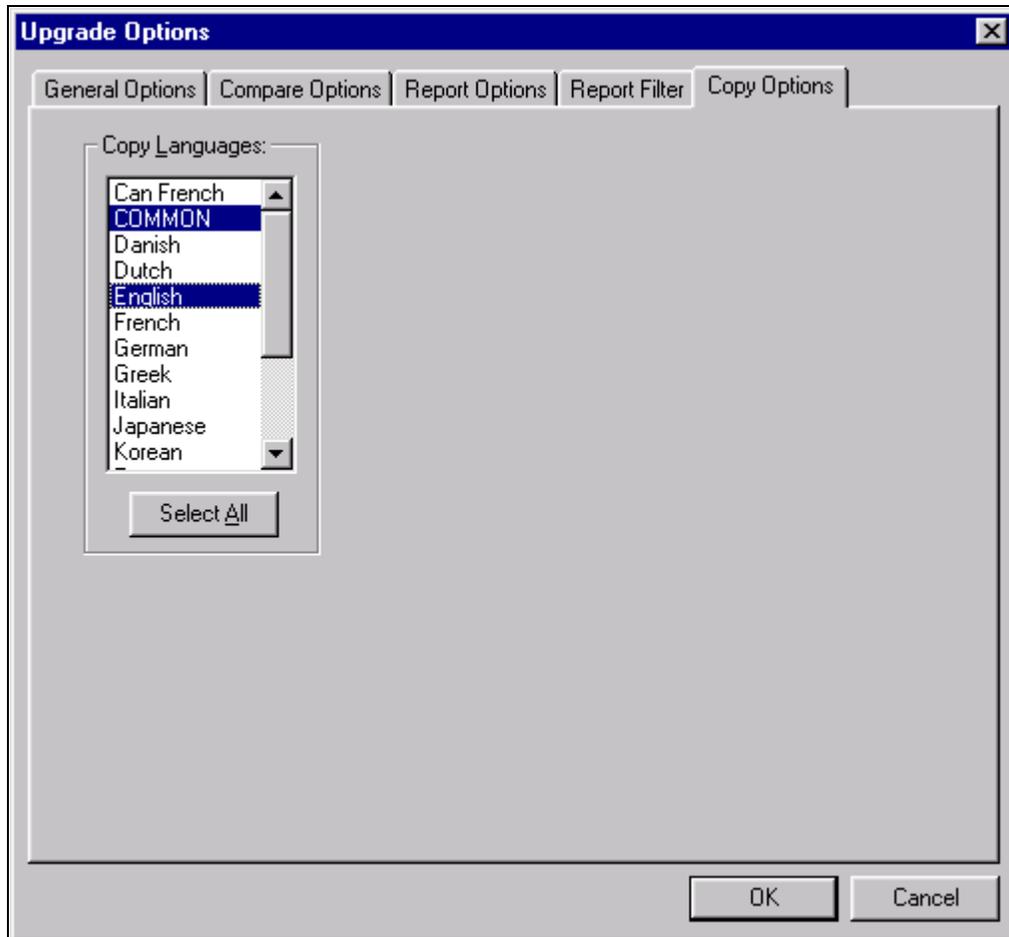
Upgrade Options dialog box: Copy Options tab

Copy Languages   Select a specific language for label-oriented characteristics of a definition, such as page names, labels, and messages.

*COMMON,*specifies basic definition characteristics and parameters in the architecture that are not language-sensitive. Select *COMMON* when you select English. Do not select *COMMON* when you select a language other than English.

If you do not select *COMMON,* basic definition characteristics are omitted.

Make sure that the languages in the source and target databases match. Otherwise, you might overwrite translations in the target. Use the Ctrl key and your mouse to clear unwanted languages.

When you save the project, the copy settings that you made are saved and remain set unless you change them again.

This table lists translation scenario examples:

Selection	*Reason*
COMMON and *English*	The source database does not include translations, but the target database has translations that you do not want to overwrite.
Languages (omit *COMMON*)	You sent the database out for translations and want to avoid copying inadvertent changes that were made by the translators to the definitions.
COMMON (omit languages)	You want to copy the source without translations to the target.

Preparing Projects for an Upgrade

This section provides an overview and discusses how to:

•   Search for definitions.

•   Print all definitions in a project.

•   Obtain access for upgrading.

•   Convert definitions.

Understanding Upgrade Projects

Before you can copy definitions from one database to another, you must insert them into a PeopleSoft Application Designer project. If you have a custom application, identify which definitions must be copied from the source into the target database. When you know which definitions you want to upgrade, specify and insert the definitions into the project.

However, when you are unfamiliar with one of the databases, you might want to populate a project by comparison—for example, when you upgrade to a new PeopleSoft application release. When you populate a project by comparison, the system compares the source and target databases and automatically populates the project with definitions that are defined differently in the two databases.

Populating Projects

To populate projects:

1. Select Insert, Definitions into Project from the PeopleSoft Application Designer menu.

   PeopleSoft Application Designer designates certain definition types as related to a parent or controlling definition type. For example, a record's related definitions can include fields, indexes, and subrecords. When you insert definitions into a project for upgrading, it can be important for these related definitions to be included.

2. Select the definitions and click Insert.

3. Select Tools, Options.

4. On the Project tab, review the settings in Related Definitions Options and reset.

Searching for Definitions

To find a definition in the project select Edit, Find from the menu. This opens the Find dialog box where you can perform a search for a text string in an upgrade definition window.

Printing All Definitions in a Project

You can print a project definition for all of the definition types in the current project. This differs from the Print menu item, which prints only the currently selected definition type that is open in the upgrade grid. The data, however, is the same.

To print a project definition for all definitions in current project, select File, Print Project from the PeopleSoft Application Designer toolbar.

Obtaining Access for Upgrading

To use the PeopleSoft Application Designer upgrade features, you must have full access to projects and upgrade access in the target database.

Also, lock all PeopleSoft Application Designer definitions in the source and target databases before comparing and copying projects. To do this, you need supervisor-level access to Change Control (in the Tools menu). If your Change Control administrator performs this action for you, the administrator's user ID is the only one that is allowed to perform the copy while the target definitions are locked.

Viewing Upgrade Messages

This section discusses how to:

- Determine whether errors were encountered.

- View messages.

- Print upgrade messages.

- Clear messages.

Understanding Upgrade Messages

During the compare and copy processes discussed in this section, if the system encounters any errors you will be notified through system messages. These messages alert you to various areas that may need to be corrected for a successful upgrade compare and copy.

Determining Whether Errors Were Encountered

Select the Upgrade tab in the output window to determine whether any errors were encountered during the Compare or Copy process.
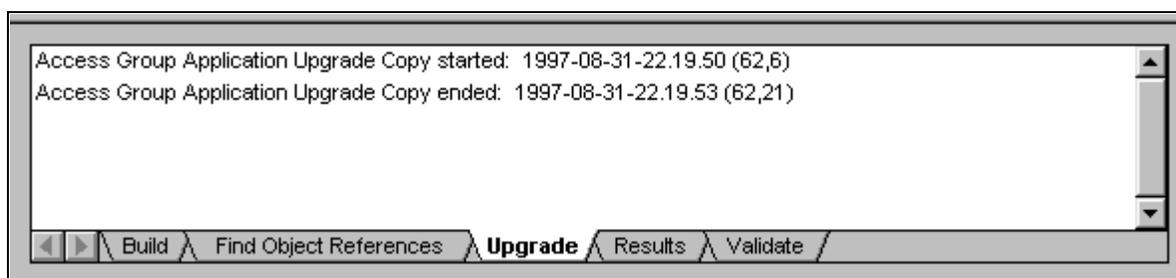
Upgrade view in the output window

This view displays upgrade messages pertaining to the definition type that was most recently displayed in the upgrade definition window. In the preceding example, Access Groups was the last definition type that was viewed in the window.

Viewing Messages

To view messages:

1. Open the project.

2. Select the Upgrade tab in the project workspace.

3. Double-click the folder of the definition type for which you want to view messages, or click the project icon to view all messages.

   Any upgrade messages for that definition type appear in the output window.

Printing Upgrade Messages

To print upgrade messages:

1. View the messages that you want to print.

2. Right-click the output window and select Print.

Clearing Messages

To clear messages:

1. View the messages that you want to clear.

2. Right-click the output window and select Clear.

Chapter 3

Comparing Source and Target Definitions

This chapter includes an overview and discusses how to:

- Work with compare reports.

- Work with workspace reports.

- Work with browser reports.

- Work with composite reports.

- Work with definition status.

- Compare and merge page definitions.

- Compare definitions for upgrade using the command line.

Understanding the Compare Process

PeopleSoft Application Designer enables you to compare the contents of the database to which you are signed on (or project within) with the target database or an exported project file. It enables you to view the status of each definition in each location so you can then decide which definitions to keep.

There are two ways to compare definitions:

- Compare all database definitions of a certain type, such as record definitions. After doing so, you populate the upgrade project with only the definitions that are defined differently in the source than in the target.

- Compare only the definitions in the current upgrade project to the equivalent definitions in the target database or file.

When performing comparisons between source and target definitions, PeopleSoft Application Designer enables you to:

- Generate workspace reports.

  These reports appear in the PeopleSoft Application Designer workspace immediately after the compare process completes.

- Generate browser reports.

  These reports are written to HTML and XML files enabling you to open the report in a browser, share the report with coworkers easily, and store report data in an industry-standard format.

- Visually compare page definitions.

  This feature enables you to view the source and target page definitions side-by-side with differences clearly marked.

- Visually compare and merge text definitions.

  This feature enables you to view the source and target PeopleCode, HTML, SQL, XSLT definitions side-by-side with differences clearly marked. It also enables you to merge source PeopleCode with target PeopleCode.

Comparing All Definitions by Type

PeopleSoft Application Designer performs comparisons on one definition type at a time. For each definition type that you select, the system removes any existing definitions of that type from the current project and repopulates the project based on the comparison results. For this reason, be careful when performing a database comparison on a predefined project.

For example, suppose that your project includes several record, page, and menu definitions and you perform a database comparison on pages only. All of the page definitions that were originally in the project are removed and replaced by any page definitions that were found in the Compare process. However, the record and menu definitions in the project are not affected.

Performing a database comparison overwrites custom upgrade settings with the defaults for the specified target orientation.

Comparing Definitions by Project

If you manually inserted definitions into the project and you want to see how those definitions differ from the same definitions in another database, perform a project comparison. This method compares only the definitions in the project and does not repopulate the project—except in record and field comparisons. Upgrade settings are never modified when you perform a project comparison.

When records are compared—during a database *or* project comparison—differences that are found in record fields are written into the project. For example, suppose that Record A in the source database contains record fields 1, 2, 3, 4, and 5, and Record A in the target database contains fields 2, 4, 6, and 7. Before the comparison, the project contains only Record A. After the comparison, the project contains Record A and record fields 1, 3, 5, 6, and 7.

Similarly, when field definitions are compared, differences that are found in the field labels are inserted into the project as new field definitions. For example, suppose that you are comparing the source with the target, and both databases have the same field definitions. However, the field label for one of those field definitions is different. The source field definition is labeled Employee ID, but in the target, it is labeled Staff ID. The Compare process creates a new field definition that is labeled Staff ID. After the comparison, the project contains both an Employee ID field and a Staff ID field.

Note. These are the only situations where a project comparison repopulates a project.

Synchronizing Databases When Comparing Record Definitions

The Upgrade Copy process synchronizes databases when performing an upgrade compare and copy for record definitions. During the upgrade copy (CopyProp only) of a table, subrecord, or temporary table, the system reorders the indexes (_, 0 through 9) to follow the source index order. The target order matches the source order after the copy.

For example, suppose that the source record, Z, is a table with fields B, A, C, G, H and the target record, Z, is a table with fields A, B, F, G, C, H where all of these conditions are true:

- F is a customization and a Key field.

- A and B are exactly the same except for field order, and both are keys.

- C, G, H are exactly the same except for field order, and they are nonkey fields.

In this example, the upgrade compare produces project items for this record:

recname	fieldname	src status	tgt status	upgrade action	take action
Z	Not applicable (NA)	Chg	UnChg	copyprop	Y
Z	F	Abs	*Chg	delete	N

* Unless the F record field is deleted, an upgrade copy and compare always shows this project item.

The result of an upgrade copy on this record changes record fields A, B, F, G, C, and H in the target database to B, F, A, G, C, and H, without moving the nonkey fields. Another upgrade compare would produce the same project items.

Likewise, during an upgrade copy of a view or dynamic view, the target order is reordered to match the source when a record field project item is copied and the source order does not match the target order.

For example, suppose that the source record, Z, is a view with fields B, A, C, and the target record, Z, is a view with fields A, B, F, C where all of these conditions are true:

- F is a customization.

- A and B are exactly the same except for field order.

In this example, the upgrade compare produces project items for these record fields:

recname	fieldname	src status	tgt status	upgrade action	take action
Z	A	Chg	UnChg	Copy	Y
Z	B	Chg	UnChg	Copy	Y

recname	fieldname	src status	tgt status	upgrade action	take action
Z	C	--	--	Copy	Y
Z	F	Abs	*Chg	Delete	N

* Unless record field F is deleted, an upgrade copy and compare always shows this project item.

The result of an upgrade copy changes A, B, F, C in the target database to B, F, A, C.

Another project compare would produce these project items:

recname	fieldname	src status	tgt status	upgrade action	take action
Z	A	Chg	UnChg	Copy	Y
Z	C	--	--	Copy	Y
Z	F	Abs	*Chg	Delete	N

* Unless F is deleted, an upgrade copy and compare always shows this project item.

Working With Compare Reports

This section discusses how to:

* Run a compare report.

* Work with the Compare and Report dialog box.

Running a Compare Report

To perform a comparison:

1. Save any changes to objects and close all windows before starting the Compare process.

   This ensures that all generated reports are saved during the Compare process. Once the process is complete, you can open the reports from a file and view them online.

2. Lock all of the PeopleSoft Application Designer definitions in the target database.

    If you perform a full comparison, it might take several days for you to review all of the comparison reports and set the upgrade settings accordingly. Locking the PeopleSoft Application Designer definitions in the target database ensures that those definitions cannot be changed between the comparison and the time that you perform the copy.

3. Turn off all tracing.

4. Select Tools, Compare and Report, and select one of these options:

    •   From Database: The PeopleSoft Signon dialog box appears, prompting you to sign in to an upgrade target database.

    •   To File: The Compare and Report From File : Select Project dialog appears for you to select the project to compare.

5. On the Compare and Report dialog box, select the types of definitions to compare from the Definition list.

6. Click Options to access the Upgrade Options dialog box.

    Set all upgrade options including comparison report filters.

7. Select the appropriate Project Item Status / Insert Child Definitions option (if enabled it allows you to preserve the original project).

8. Click Compare to perform the comparison.

    The system creates online reports for the definitions that you are comparing. Upgrade Compare reports are saved to the location you specify in the Report Output Directory field in Tools, Options on the General tab.

Note. You can also compare definitions using command line syntax.

Working with the Compare and Report Dialog Box

Access the Compare and Report dialog box.
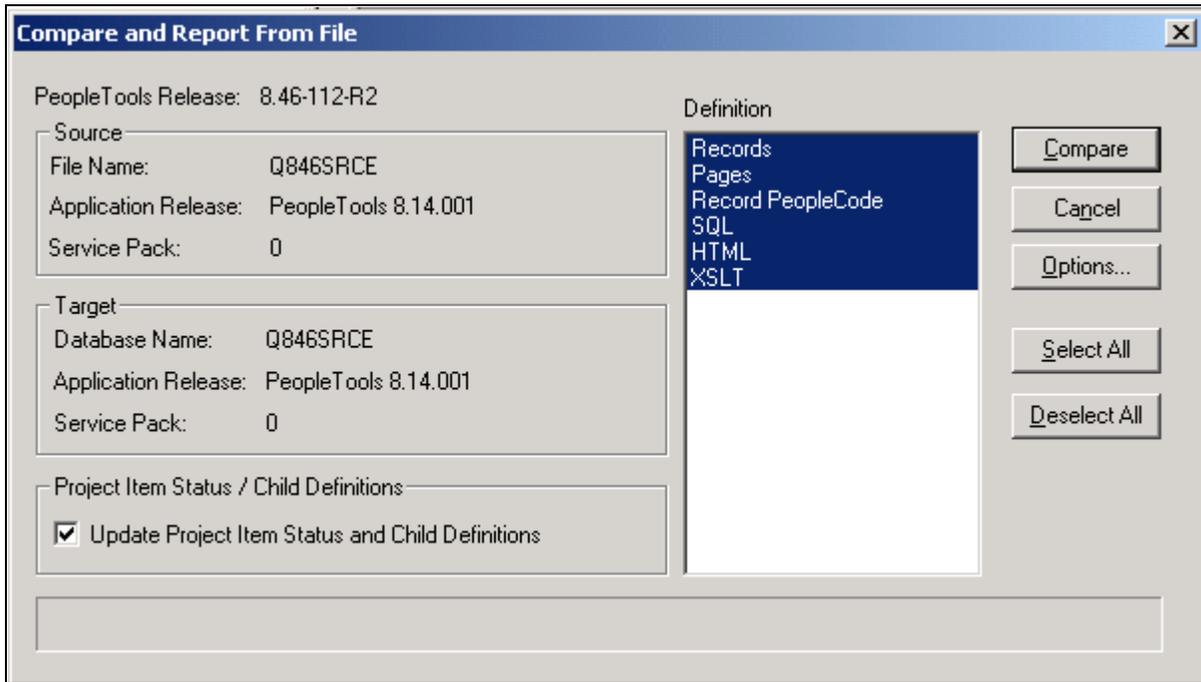
Compare and Report dialog box

Note. Depending on whether you are comparing to a database or from a file, the dialog box name changes accordingly.

Source	Identifies the file or database name, the application release, and the service pack level of the source file or database.
Target	Identifies the database name, the application release, and the service pack level of the target database.

Update Item Status/Child Definitions	Deselect the Update Project Item and Child Definitions option to preserve the status of the items in your upgrade project and the child definitions when running a compare. Child definitions apply only to records and fields in which fields are the child definitions of the record, and field labels are the child definitions of record fields.

When running a compare report, the system compares the definitions in an another database or file to the database to which you are currently signed on. Based on the compare results, the system updates the status of the project items in your upgrade project in the definition window. For example, after running the compare, the system inserts the status of the Source and Target (Absent, Changed, Unchanged, and so on), the Action to take (None, Copy, CopyProp, and so on).

Regarding child definitions with the case of records, if a record is the same version in both places, the system removes the fields. With the case of fields, if a field is the same version in both places the system removes the field labels from the upgrade project definition.

When a child item is found to be different between the two places, then that item is inserted into the project so the child item can then be copied as a unique item. When this option is deselected, no child items are deleted nor inserted into the project.

In some cases, as in when you want to compare the same upgrade project to multiple sources, for example a demo database, a production database, and a project file, you may decide to deselect this option so that the source upgrade project remains unchanged. When deselected, the project item status and child definitions information only appears in the generated compare report, not online in the PeopleSoft Application Designer project definition.

Note. By default, this setting is selected, which should accommodate most situations.

Note. This option applies only when performing project compares, and is not applicable when performing a full database compare (Compare Type is set to Database on the Compare Options tab in the Upgrade Options dialog box). A full database compare should start with an empty upgrade project and insert the different items into the upgrade project.

Note. When performing a compare from file, if the option is turned off, the resulting project definition after the compare will have the same status settings and project items as in the file project definition. The compare reports will still reflect the status settings and differences in any child items. When the option is left on, the compare will change the project definition based on the compare results, changing the status settings, and inserting or deleting child items as needed.

Definition	Displays the current set of definitions being compared. The system only compares the definitions in the list that are highlighted.
Compare	Executes the compare process.

Cancel	Cancels the compare process.
Options	Opens the Upgrade Options dialog box.
	See Chapter 2, "Upgrading with PeopleSoft Application Designer," Setting Upgrade Options, page 9.
Select All/Deselect All	Selects all the definitions in the Definition list, or deselects all.

Working With Workspace Reports

PeopleSoft provides online comparison reports in PeopleSoft Application Designer. These reports appear in the project workspace area after you run a compare report.

This section discusses how to:

- Access reports.

- Search for definitions in reports.

- Print the report.

- Save reports as text files.

Accessing Reports

To access reports:

1. Select Tools, Compare and Report from the PeopleSoft Application Designer toolbar.

2. Sign in to the target database.

   The system automatically displays a comparison report for each definition that you selected to be copied. If the current definition type has a PeopleSoft Application Designer based editor, you can double-click the definition name in the report to open it. If the comparison report is large, you can search for specific definition names.

Searching for Definitions in Reports

For long compare reports, it is useful to perform a search to locate specific items. The Find in Report feature searches by column. To search for an object in a comparison report highlight or place your cursor in the column that you want to search and select Edit, Find in Report.

Printing the Report

This section provides an overview of a report and discusses how to:

- Print the comparison report.

- Print a comparison report from a file.

- Move print files.

Printing the Comparison Report

This is a print preview of the comparison report:

Print preview comparison report

To print the comparison report select File, Print. The standard Print dialog box appears, enabling you to select the printer, number of copies, and so on.

Printing a Comparison Report From a File

To print a comparison report from a file:

1. To print a saved comparison report, select File, Report from File.

2. Select Print Preview, Print, or View Report.

   These options require that you specify the report name and its location in a standard Open dialog box. View Reportdisplays the specified report in the project workspace.

Moving Print Files

You might want to move the comparison report files to another directory or send them as email attachments. Each comparison report file is saved as two files with the following format:

- Upg<number>DefinitionType.prt

- Upg<number>DefinitionType.idx

Both files (filename.prt and filename.idx) are required to view or print the report.

Saving Reports as Text Files

While the report is open in the workspace, you can save the workspace report as a text file. This enables you to import the report results into applications of your choice, such as Microsoft Excel.

To save the workspace report as a text file:

1. Select File, Save Report As.

2. On the Save Report As dialog box insert a file name into the File Name edit box, and select a file type from the Save as type drop-down list.

   You can select *Tab Delimited (.txt)* or *Comma Delimited (.csv).*

3. Click Save.

Working with Browser Reports

This section provides an overview and discuses how to:

- Access and share browser reports.

- Select a project.

- Search for definitions.

- View report details.

- View status summary.

- View compare results by definition type.

Understanding Browser Reports

Browser reports enable you to view compare results using your browser.

You use the Compare Report Viewer to view and navigate within the results. The Compare Report Viewer is a client-based HTML program through which you view the compare results, which are stored in XML. Having the compare results in HTML and XML enables you to:

- Share compare results online with colleagues that do not have PeopleTools installed.

- Display results in custom formats using the data stored in the generated XML files.

By setting the Generate Browser Reports option, when you run the Compare and Report process, the system generates browser reports in addition to the workspace reports that automatically appear in the PeopleSoft Application Designer workspace.

Accessing and Sharing Browser Reports

This section discusses how to:

- Access browser reports.

- Share browser reports.

Accessing Browser Reports

To access a browser report double-click on the line in the output window containing "Browser Compare Report Created."

PeopleSoft Compare Report Viewer

The Viewer menu contains menu options related to navigating within the report. The Definition Types menu enables you to dill down into the compare data for each definition type compared. The Definition Types menu only contains the definitions compared.

Sharing Browser Reports

PeopleSoft Application Designer writes the browser reports to a subdirectory named after the project name within the Report Output Directory specified on the General tab on the Options dialog. For example, if the Report Output Directory is c:\psreports and the project name is "PROJECT," then the browser reports exist in c:\psreports\PROJECT. To view the compare results, double-click CompareViewer.html and then select the desired project name.

For each type of definition you compare, there is a subdirectory containing XML files storing the compare data for that definition type. For example, if you compared pages, the XML file containing compare data for the page compare exists in c:\psreports\PROJECT\Pages. These files can be used as source data for custom displays of the compare data. The PeopleSoft Compare Report Viewer uses these XML files along with various HTML and XSL files to present your compare data.

To share the browser reports, PeopleSoft recommends:

* Copying the entire high-level report output directory (containing all subdirectories, HTML, and XSL files) and copying it to a shared network drive.

* Compressing the entire directory and sending or posting individual copies as needed.

Selecting a Project

If you've run multiple compare reports on the same workstation, the PeopleSoft Compare Report Viewer enables you to switch between them easily.

To select a project:

1. Click Select Project.

2. Select the appropriate project in the Project Name list.

Searching for Definitions

You can search for specific definitions within the compare data.

To search for definitions:

1. Select Search.

2. From the Definition Type list, specify the appropriate definition type, such as *Records*.

3. In the Search Text edit box, enter the name or part the name of the definition you want to view.

   Note. You must enter at least three characters.

   Note. The search returns the parent and child definitions. For example, if you enter 'RecordA' that contains FieldB and Field C, the search returns RecordA, RecordA.FieldB, and RecordA.FieldC. Also, the search returns all definitions beginning with the search string entered.

4. Click Search.

Viewing Report Details

Click Report Details to view information related to the databases and/or files compared.

Project Name	The name of the project in the primary database.
PeopleTools Release	The PeopleTools release number on which the primary database runs.
Source Database/Source File	The name of the primary database or file depending on which compare option you selected.
Source Date	The date the primary database was last updated.
Target Database	The name of the secondary database.
Target Date	The date the secondary database was last updated.
Compare By	Displays the Comparison options selected on the Compare Options dialog box either the release or date. See Chapter 2, "Upgrading with PeopleSoft Application Designer," Setting Upgrade Options, page 9.

Viewing Status Summary

To view the status summary, click Status Summary.

The status summary is a high-level view of the compare results showing the definitions compared and the occurrence of differences. The summary table indicates whether the difference occurred because of additions, modifications, or deletions that were the result of activity at your site, or whether the difference occurred as a result of an addition or modification made by PeopleSoft. This summary can be useful for managers and executives who are scoping and budgeting for an upgrade.

Each of the columns in the status summary indicate the number of items found to differ by definition type. The columns represent the "Source" and "Target" status values set during the compare process. You can click on any of the cell values to view the items filtered for each particular status result. You can also click the value in the Definition Type column to view further status information.

The following table shows how each column in the status summary table equates to the status in the source and target locations.

Customer Added	Source: Absent Target: *Changed or *Unchanged
Customer Modified	Source: Changed or Unchanged Target: *Changed or *Unchanged

Customer Deleted	Source: Absent
	Target: Changed or Unchanged
PeopleSoft Added	Source: Any
	Target: Absent
PeopleSoft Modified	Source: Changed or Unchanged
	Target: Changed or Unchanged

Note. If you have generated composite reports, two tabs appear for the status summary: Compare Report and Composite Report.

Note. The compare report values reflect the assumption that the source is the delivered PeopleSoft demonstration database and the target is a customer's production copy of a database.

See Also

Viewing Compare Results by Definition Type

The Definition Types menu displays a menu item for each type of definition you compared. Click the link for a particular definition type to view the comparison results for each definition of that type.

Each definition compared appears in a grid containing identification information relevant to that definition type as well as the status of the definition in each location, the action, and the upgrade flag. The identification columns are links enabling you to drill down into the compare results of that definition so you can compare source and target values.

Expand All	Expands all definitions in the grid to reveal all associated attributes and child definitions.
Collapse All	Collapses the expanded grid so that only the list of definitions appear.
Show All Attributes	Click to show all attributes within a definition in Expand All mode after hiding an attribute or hiding all attributes.
Hide this/all Attribute	Hides the values of a specific attribute, or hides all attributes of a specific type.
Next, Previous, First, Last	Enables you to navigate between pages in a report containing multiple pages.
Items Per Page	Shows the number of items appearing on a single, current page, and the total number of items in the project.

Note. If you have generated a composite report, two tabs appear: Compare Report and Composite Report.

See Chapter 3, "Comparing Source and Target Definitions," Working with Definition Status, page 41.

Working with Composite Reports

This section provides an overview and discusses how to:

- Generate composite reports.

- Work with composite report output.

- Example: Create a composite report.

Understanding Composite Reports

When performing a PeopleSoft application upgrade, part of the process involves identifying the customizations made on your previous database and ensuring that all customizations are reflected in the upgraded database. During the development of a new PeopleSoft application release, many changes are made to the underlying meta data of the PeopleSoft application. If your application database is highly customized, it's likely that you've customized at least some of the definitions that PeopleSoft has modified in the new release. You identify your customizations and PeopleSoft modifications by running compare reports.

For example, suppose you are performing an upgrade from PeopleSoft 8.1x applications to PeopleSoft 8.4x applications. To identify your customizations, you run compare reports between your current 8.1x production database and the delivered 8.1x DEMO database. Then, to view your customizations and the PeopleSoft modifications after your 8.1x database has been upgraded to the 8.4x version, you run compare reports between your upgraded database and the delivered DEMO version of the 8.4x database.

Generating composite reports during this process greatly enhances your ability to identify the definitions that both you have customized and that PeopleSoft has modified. Composite reports compare your previous compare reports to the target database. The information in the previous compare reports is considered a subset of the composite reports. That is, all data appearing in the previous compare reports also appears on the composite reports, and those attributes that were updated by your organization and PeopleSoft will be highlighted.

The report output displays the changed attributes of the definitions so that you can determine the level and granularity of your customizations and how much effort will be involved in reapplying your customizations during the upgrade. This information can assist the decision making process when assessing the upgrade project scope.

Note. Composite reports are not a comprehensive record of *all* changes in the system. They only reflect definitions that have been changed by PeopleSoft *and* by a customer implementation.

Note. Composite reports do not replace compare reports. Rather, a composite report provides an alternate display of the information in compare reports, showing information appearing in both old release and new release compare reports.

Note. Composite reports are generated only for definitions that exist within both databases. For example, Analytic Model definitions used for the PeopleSoft Analytic Calculation Engine do not exist in a PeopleTools 8.1x application database. If comparing between a PeopleTools 8.1x application database and a PeopleTools 8.47 application database, a composite report for Analytic Model definitions will not be generated, as those definitions do not exist within a PeopleTools 8.1x database.

Generating Composite Reports

Before generating composite reports, consider the following:

- Compare report output (.PRT files and .IDX files) generated from the previous version must exist in an accessible directory. All reports must exist in the same directory, and the report file names must not have changed since they were originally generated.

- The previous compare reports must have been generated on applications running on at least PeopleTools 8.1x. Compare reports generated by PeopleTools versions prior to 8.1x, such as PeopleTools 7.x or 7.5x are not supported.

- Composite reports should only be generated when necessary, as in during the Enterprise upgrade process. Generating composite reports can be time consuming and can cause performance degradation.

- If you have selected Generate Browser Reports on the Report Options tab in the Upgrade Options dialog box, the system also generates browser reports for the composite reports. To view the composite reports in the browser, click the Composite Report tab in the Report Viewer.

- Any filtering options you've set on the Report Filter tab in the Upgrade Options dialog box also apply to the composite reports.

To generate a composite report:

1. Make sure that the compare reports generated from your previous release exist and reside in an accessible directory.

2. Launch Application Designer and sign on to the delivered PeopleSoft demonstration database.

3. Select Tools, Compare and Report, To Database.

4. On the Compare and Report dialog box, select Options.

5. On the Upgrade Options dialog box, select the Report Options tab.

6. Select the Generate Composite Reports check box, which activates the Old Release Report Output Directory and Old Release Source Database Name edit boxes.

7. In the Old Release Report Output Directory edit box, enter the directory where the compare reports generated from your previous database reside.

8. In the Old Release Source Database Name edit box, enter the name of your original, source database (which is typically the PeopleSoft demonstration database from the previous release), and click OK.

   At this point, the process is identical to running a typical compare report. When the report completes, Application Designer displays both reports: the regular compare report and the composite report for each type of definition compared.

Note. The naming convention for composite reports is similar to compare reports, only the prefix for composite report file names is "Cmp". For example, the naming convention for composite reports is Cmp<number><definition>, as in Cmp05Pages.prt and Cmp05Pages.idx.

Working With Composite Report Output

Generate a composite report.

Composite Report sample output

Old Release	Previous release source data value. In a PeopleSoft upgrade, this is the source value from the DEMO database in the previous release.
New Release	New release source data value. In a PeopleSoft upgrade, this is the source value from the DEMO database in the new release, which reflects the modification performed by PeopleSoft development teams. If no modification has been made by PeopleSoft for a particular attribute, the value "<same>" appears in the New Release column.

Note. Changes represented here are not necessarily performed by PeopleSoft. If the compare reports were ran against your development environment, the modification was made in-house, not by PeopleSoft.

Customization	New release's copy of the production target value. In a PeopleSoft upgrade, this is the target value from the copy of the production database against which all upgrade scripts have been run.

Example: Creating a Composite Report

To illustrate how the system compiles and displays composite report information, this section provides a simple example. Keep in mind that this example only displays information for one definition. A typical composite report can contain information pertaining to hundreds of definitions. This example shows:

- Compare report results between a PeopleSoft 8.1 demonstration database and PeopleSoft 8.1 production copy.

- Compare report results between a PeopleSoft 8.4 demonstration database and PeopleSoft 8.4 production copy.

- Composite report result based on the previous compare report results.

Compare Report Results Between a PeopleSoft 8.1 Demonstration Database and PeopleSoft 8.1 Customer Production Database

This compare report shows customizations. For the field, FLD1, the following customizations were made:

- Field Length: 10 to 12

- Description: ABC to XYZ

- Owner ID: PPT to CUST

With these customizations, the compare report results would appear as follows:

Definition Name	Source Status	Target Status	Attribute	Source Value	Target Value
FLD1	Unchanged	*Changed	Field Length	10	12
			Description	ABC	XYZ
			Owner ID	PPT	CUST

Compare Report Results Between a PeopleSoft 8.4 Demonstration Database and PeopleSoft 8.4 Customer Production Database

This report shows customizations and PeopleSoft modifications.

For the field, FLD1, the following customizations were made:

- Field Length: 10 to 12

- Description: ABC to XYZ

- Owner ID: PPT to CUST

For the field, FLD1, PeopleSoft made the following modifications:

- Field Length: 10 to 14

- Format: Upper to Mixed

- Field Type: Char to Long Char

With these customizations, the compare report results would appear as follows:

Definition Name	Source Status	Target Status	Attribute	Source Value	Target Value	Note
FLD1	Unchanged	*Changed	Field Length	14	12	PeopleSoft modification + Customization
			Description	ABC	XYZ	Customization Only
			Owner ID	PPT	CUST	Customization Only
			Format	Mixed	Upper	PeopleSoft modification only
			Field Type	Long Char	Char	PeopleSoft modification only

Composite Report Result Based on the Previous Compare Report Results

The following table is a sample composite report only showing the attributes from the previous compare reports that were changed by both PeopleSoft and a customer.

Definition Name	Attribute	Old Release	New Release	Customization
FLD1	Field Length	10	*14*	*12*
	Descr	ABC	(same)	*XYZ*
	OwnerID	PPT	(same)	*CUST*

Working with Definition Status

This section discusses how to:

• Determine definition status.

• Compare source status to target status.

Determining Definition Status

PeopleSoft Application Designer defines the status of a definition in the source and the target database.

Unknown	Definition has not been compared. This is the default status for all definitions inserted manually into a project and the permanent status of all non-comparison definitions.
Absent	The definition was found in the other database, but not in this one. When upgrading to a new PeopleSoft release, all new PeopleSoft definitions should have Absent status in the target database and all of your custom definitions should have Absent in the source database.
Changed	The definition has been compared, the LASTUPDOPRID value is PPLSOFT, and the LASTUPDDTM value is greater than the date/time stamp of the comparison release database. This indicates that PeopleSoft modified the definition since the comparison release.
Unchanged	The definition has been compared, the LASTUPDOPRID value is PPLSOFT, and the LASTUPDDTM value is less than or equal to the date/time stamp of the comparison release database. This indicates that PeopleSoft modified the definition prior to the comparison release.
***Changed**	The definition has been compared, the LASTUPDOPRID value is *not* PPLSOFT, and the LASTUPDDTM value is greater than the date/time stamp of the comparison release database. This indicates that a customer modified the definition since the comparison release.
***Unchanged**	The definition has been compared, the LASTUPDOPRID value is *not* PPLSOFT, and the LASTUPDDTM value is less than or equal to the date/time stamp of the comparison release database. This indicates that a customer modified the definition prior to the comparison release.
Same	The definition has been compared and is defined the same in both databases. When a definition in one database has this status its counterpart in the other database will have the equivalent status. This status can be seen when performing a project comparison because with a project comparison the definitions are static; the project is not repopulated based on the comparison results. This status is not seen in a database comparison, because when doing so the project is populated only with definitions defined differently.

Note. Compare by release date is determined by finding the highest release label in common between the source and target databases. PSRELASE.RELEASELABEL column is searched on both source and target to find the latest common value between the two. Then PSRELEASE.PSRELEASEDTTM for that label is used for compare by release date for the source and target, respectively. You can override this value to set a different release label, or specific compare by date, on the Upgrade Options interface. Only common release labels (found on both source and target PSRELEASE table) can be used.

Comparing Source Status to Target Status

The following table summarizes the possible status, action, and upgrade values that could be applied to a single definition during the comparison process.

Source Status	Target Status	Action	Other Action	PeopleSoft Vanilla	Keep Customizations
Absent	Changed or Unchanged	DELETE	None	True	True
Absent	*Changed or *Unchanged	DELETE	None	False	False
Changed	Absent	COPY	None	True	True
Changed	Changed or Unchanged	COPY	COPYPROP	True	True
Changed	*Changed or *Unchanged	COPY	COPYPROP	True	False
Unchanged	Absent	COPY	None	True	True
Unchanged	Changed	COPY	COPYPROP	False	False
Unchanged	Unchanged	COPY	COPYPROP	True	True
Unchanged	*Changed or *Unchanged	COPY	COPYPROP	True	False
*Changed	Absent	COPY	None	True	True
*Changed	Changed or Unchanged	COPY	COPYPROP	False	True
*Changed	*Changed or *Unchanged	COPY	COPYPROP	True	True
*Unchanged	Absent	COPY	None	True	True
*Unchanged	Changed or Unchanged	COPY	COPYPROP	False	True
*Unchanged	*Changed	COPY	COPYPROP	False	False
*Unchanged	*Unchanged	COPY	COPYPROP	True	True
Absent	Absent	None	None	False	False
Same	Same	None	None	False	False
Unkown	Unkown	None	None	False	False

The Action, Other Action, PeopleSoft Vanilla, and Keep Customizations are described in the following sections.

Action

Describes the upgrade action set for an item.

DELETE	(DEL) The item will be deleted from the target database during the copy.
COPY	The item will be copied to the target database during the copy.

Other Action

Describes the action when the system finds differences in record or field definitions.

Note. Used for record and field definitions only.

COPYPROP	Copy properties of the item only. That is, for records, only copy the record definition, and not record fields. For fields, copy field definition only, and not the field labels.
NONE	Use the default action instead (DELETE or COPY).

PeopleSoft Vanilla

Describes the setting of the Upgrade flag for the project item when performing the Vanilla Compare type (set on Upgrade Options).

True	Upgrade flag is ON.
False	Upgrade flag is OFF. You must override this value in order to have Copy perform the action set in the Action column.

Keep Customization

Describes the setting of the Upgrade flag for the project item when performing the Keep Customizations Compare type (set on Upgrade Options).

True	Upgrade flag is ON.
False	Upgrade flag is OFF. You must override this value in order to have Copy perform the action set in the Action column.

Comparing and Merging Page Definitions

This section discusses how to:

- Compare and merge page definitions.

- Work with the Diff / Merge Page interface.

Comparing and Merging Page Definitions

To compare and merge page definitions in the Upgrade view:

1. Open the upgrade project, and make sure that you are in the Upgrade view.

2. Open the Pages window within the upgrade project.

3. Select the page(s) that you want to compare.

4. Right-click on the Pages window to display the context menu.

5. Select Diff / Merge Page, and then select one of these options:

   - From Database: select if you are comparing the current definitions with definitions in another database. After doing so, sign on to the appropriate database using the PeopleSoft Signon window.

   - From File: select if you are comparing the current definitions with definitions in a project file. After doing so, navigate to the appropriate file using the Merge from File: Select Project dialog box.

To compare and merge page definitions from the Development view:

1. Open the page definition that you want to compare.

2. Select Diff / Merge Page, and then select one of these options:

   - From Database: select if you are comparing the current definitions with definitions in another database. After doing so, sign on to the appropriate database using the PeopleSoft Signon window.

   - From File: select if you are comparing the current definitions with definitions in a project file. After doing so, navigate to the appropriate file using the Merge from File: Select Project dialog box.

Note. For the compare to work, the name of the page in the external database or project file must have the same name (the same key value) as the page in the current database.

Working with the Page Compare Results

This section discusses how to:

- Use the Diff / Merge for Page interface.

- Determine differences between page definitions.

- Use the Properties panel.

- Merge attributes and properties from source to target.

Using the Diff / Merge for Pages Interface

After successfully connecting to the database or file, the interface appears similar to the following example.
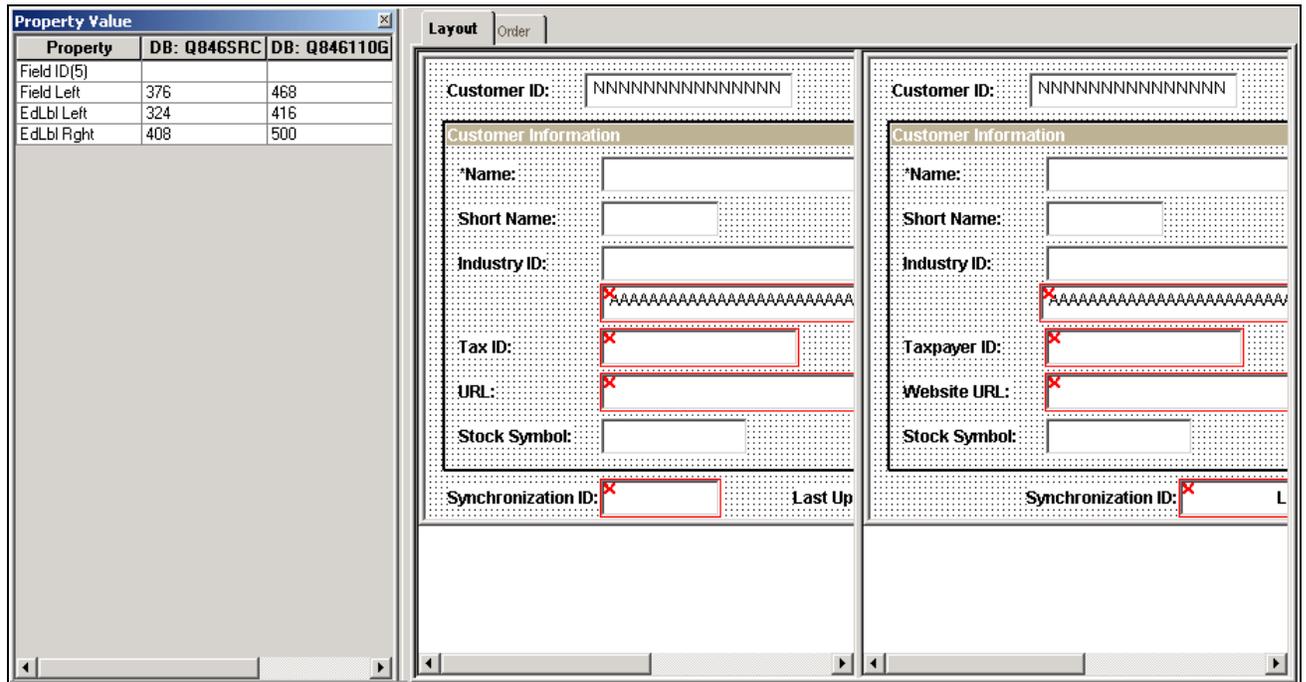
Page definition Diff / Merge interface

The PeopleSoft Application Designer displays a Property Value panel to show details about every difference or each changed page control. To the right, each page is displayed side-by-side enabling the visual comparison.

Note. The pages appear in a read-only state. You cannot make any changes to either page definition from the Visual Compare interface.

Determining Differences between Page Definitions

When there are differences between source and target page definitions, the system illustrates this in the Layout tab by surrounding the page field with a red box with a red 'X' at the top, left-hand corner. The field in which you have placed your cursor has a dotted line surrounding it.

On the Order tab, page controls that have differences are highlighted in red. Also, if you select a page control, you can see easily if its order is different as the highlighted areas do not match.

Page definition Visual Compare: Order tab

                     Use the Previous Difference and Next Difference toolbar buttons to
                                          navigate quickly between the differences flagged within the active window.

Using the Properties Panel

The Properties panel enables you to view the details regarding the differences between the source and target
page controls. You can move the panel and dock it to the desired locations.

By placing your cursor into each page control surrounded by a red box, the differences in properties between
the source and target definition for that particular page control appear on the Properties panel. You can also
use the TAB key to move from field to field. For page controls that are identical between the source and
target, nothing appears in the Properties panel.

Page fields are identified in the Property Value panel by the field ID value displayed on the Order tab.

Property Value Panel

Property	Displays the list of properties associated with a particular page field or control.
	Note. The properties appearing for different page fields and controls may differ. Many of the properties are only used internally by PeopleTools for page display and position.

[A] <**Signed on Database Name**>	Displays the property values for a page field or control residing in the database to which you are currently signed on. In the context of merging pages, this is the "target" definition.
[B] <**Database Name/Project File Name**>	Displays the property values for a page field or control residing in an external database or project file. In the context of merging pages, this is the "source" definition.

Note. If needed you can access the page definition properties by selecting File, Object Properties or clicking ALT + ENTER.

Merging Attributes and Properties from Source to Target

When merging attributes of a page definition it is important to keep in mind where the two definitions you are merging reside. The database to which you are signed on is A:, or the "target," and the database or project file from which you are merging page properties is B:, or the "source."

Use the A and B buttons to control the merging of page definitions between the target and source.

	Click B to merge a page field, a control, or the properties of a field, to your target database (A:).
	Click A to undo any previously merged items from the B page definition. The A button is active only after you have previously merged items from the B page definition.

Note. Before using the A or B buttons, you need to place the cursor on the page field or page control that you intend to merge from one definition to the other.

Note. The only way to manipulate the page definitions during the diff / merge operation is by using the A and B buttons.

Using the Merge Output Window

After running a diff / merge for pages operation, the Merge tab appears in the output window of the Application Designer work space. The Merge tab enables you to view the status of your merge operation as it records each event, such as:

• the initiation of the merge.

• the name of the page being compared.

• the number of differences identified between the two definitions.

• the operations that have occurred (merge Add, undo merge, and so on).

• the name of the saved, merged page definition.

For example:

Opening Visual Merge: MYPAGE(Page)

Comparing [A(ENG,DUT)], [B(ENG,DUT)]

2 difference(s)

(5) Merge: [B](ID:5)–>[A](ID:5)

(4) Merge, Add: [B](ID:13)–>[A](ID:0)

Save [A]:MYPAGE_NEW(Page)

Saving Merged Definitions

After you have determined that all of the appropriate page fields and page controls have been merged into your target definition, save your changes. By doing so, the system renames the target definition according to the following naming convention:

<previous_page_name>_NEW

Comparing Definitions for Upgrade Using the Command Line

Use the same command line syntax as identified previously to compare definitions.

See *PeopleTools 8.52: PeopleSoft Application Designer Developer's Guide*, "Using Command Line Parameters," Understanding PeopleSoft Application Designer Command Line Parameters.

Use the command line statement for an Upgrade Compare process to:

•   Connect to the source database.

•   Connect to the target database.

•   Perform a project or database compare (based on parameters).

•   Create compare reports in the specified output directory.

Available Parameters

This table lists all of the available parameters for the upgrade compare statement:

Parameter	Description	Error Handling
-HIDE	Use to hide the PeopleSoft Application Designer interface. Always use this parameter when performing a command line Compare process.	Required for all project command line processes.

Parameter	Description	Error Handling

-FLTR	Report filter.
	
	The command line report filter options are equivalent to those displayed on the Report Filter tab on the Upgrade Options dialog box.
	
	The syntax is:
	
	`-FLTR XXXXX XXXXX XXXXX XXXXX XXXXX`
	
	Where each *X* corresponds to a specific check box on the Report Filter tab, and each set of X's corresponds to a row in the matrix on the Report Filter tab, moving left-to-right, top-to-bottom, beginning with the top, left-hand corner (Source, Absent/Target, Absent).
	
	The value of *X* can be either a *0* (not selected) or *1* (selected).
	
	For example:
	
	`-FLTR 00000 00011 00011 01111 01111`
	
	Using this example, and comparing this to the GUI on the Report Filter tab, none of the check boxes would be selected in the first row, only the check boxes in the Custom Changed and Custom Unchanged columns would be selected, and so on.
		Optional. If report filter options are not submitted on the command line, the system uses the current settings on the Report Filter tab on the Upgrade Options dialog box.

-CT	Source database type. Enter the type of source database to which you're connecting (for example, ORACLE, SYBASE, and so on). Choose from the Database Type Selection table.	Required. If the process stops, error messages are written to the log file (if the log file name parameter is specified).
-CS	Source server name. Enter the name of the source database server for the database to which you're connecting.	Required for some database types. If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).

Parameter	Description	Error Handling
-CD	Source database name. Enter the name of the source database to which you are connecting, as you would enter it into the PeopleSoft Login dialog box.	Required. If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-CO	Source user ID. Enter the PeopleSoft user ID to use to sign in to source database.	Required. If you do not supply this parameter, the user ID is taken from the registry. If it fails, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-CP	Source user password. Enter the password for the specified user ID for source database.	Required. If you do not supply this parameter, the PeopleSoft Login dialog box prompts the user to enter the valid user password. If the password fails, the process tops error messages are written to the log file (if the log file name parameter is specified).
-TS	Target server name. Enter the name of the target database server for the database to which you're connecting.	Required for some database types. If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-TD	Target database name. Enter the name of the target database to which you are connecting, as you would enter it into the PeopleSoft Login dialog box.	Required. If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-TO	Target user ID. Enter the PeopleSoft user ID to use to sign in to the target database.	Required. If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-TP	Target user password. Enter the password for the specified user ID for the target database.	Required. If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).

Parameter	*Description*	*Error Handling*
-LF	Log file name. Enter the name of the file in which error messages are logged during the command line Upgrade Compare process.	Not required. If you do not supply this parameter, a file is created with the specified path and name, and all of the error messages are written to that file.
-PJM	Source project name. Enter the name of the project that is to be compared from the source database to the target database. This project should be available in the source database before starting the command line Upgrade Compare process to the target database.	Required. This is the main parameter that is used internally by the executable file to identify an upgrade compare. If you do not supply this parameter and if you supply all of the source database login parameters, this executable file starts the application.
-CL	Commit limit Enter the Commit limit (a number greater than 0) for the number of objects to be copied or compared before a commit is issued. Example: -CL 150	Not required. The default is 50.
-AF	Audit flags on records (0 or 1). Enter 1 to keep the target audit flags as is. Enter 0 to take them from the source database. Example: -AF 0	Not required. The default is 1.
-PPL	Portal registry structures permission list references. Enter 1 to keep the target portal registry permission list references as is. Enter 0 to take them from the source database. Example: -PPL 0	Not required. The default is 1.
-DDL	DDL on records and indexes (0 or 1). Enter 1 to keep the target database DDL flags as is. Enter 0 to take them from the source database. When keeping the target database DDL, no differences are shown on the compare report. Example: -DDL 0	Not required. The default is 1.

Parameter	*Description*	*Error Handling*
-CFD	Chartfield PageField Display Size (0 or 1). Enter 1 to keep the target database chartfield pagefield display size attributes. Enter 0 to take them from the source database. When keeping target database attributes, no differences are shown on the compare report for these attributes. Example -CFD 0	Not required. The default is 1.
-CFF	Chartfield Field Format (0 or 1). Enter 1 to keep the target database chartfield field format attributes. Enter 0 to take them from the source database. When keeping target attributes, no differences are shown on the compare report for these attributes. Example: -CFF 0	Not required. The default is 1.
-CMT	Compare type: project (1) or database (0). Example: -CMT 0	Not required. The default is 1.
-TGT	Target Orientation: PeopleSoft vanilla (0) or keep personalization (1).	Not required. The default is 0.
-CBY	Comparison By: To compare by release, enter REL, followed by the release number. To compare by date, enter DAT, followed by a date in the following format: YYYY-MM-DD-HH.MM.SS.sss. Release numbers are included in the Available Release Numbers list. Example: 2002-02-01-12.00.00.000	Not required. The default is REL.
-ROD	Report Output Directory. Enter the report output directory location. Example-ROD c:\temp\upgreports	Not required. If you do not supply this parameter, the system uses the Report Output Directory value from the Tools, Options General tab.

Parameter	Description	Error Handling
-OBJ	Definition type to compare List the definition types to compare as numbers with commas as delimiters, or enter All. Example: -OBJ 0,1	Not required. If you do not supply this parameter, then all of the definitions are compared by default. For a project comparison, this refers to all definitions in the project. For a database comparison, this includes all definitions in the database. For example, If you choose records and indexes alone for copying, use the appropriate numbers for records and indexes from the Definition Type Selection table. For records, the number is 0, and for the indexes, the number is 1.
-LNG	Compare languages. List the language codes with commas as delimiters, or enter ALL to select all available languages. For new languages that are not listed in the Language Selection table, use the xlat short name from the LANGUAGE_CD field in the translate table. For example, if you choose English and Spanish for comparing, enter the appropriate codes for English and Spanish from the Language Selection table. For English, the code is ENG, and for Spanish, the code is ESP. Example: -LNG ENG,ESP	Not required. If you do not supply this parameter, then the languages that are already set in the project are used as the default. The COMMON language code refers to nonlanguage attributes that are not translated. Translated attributes can be compared separately from nontranslated attributes. If you do not specify the COMMON code when using -LNG, you compare only the translated language attributes. Changing languages on the command line changes the values that are stored with the project definition. Subsequent Copy and Compare processes on the modified project use the new values unless they are explicitly changed again in the upgrade options.
-CMTBL [0|1]	Select this option to write the compare output to database tables. This enables you to keep a historical record of your compares in your database, and it also provides you the flexibility of being able to design custom queries for analyzing specific definitions, attributes, and so on. Enter 1 to enable this option, and enter 0 to disable this option. See Chapter 2, "Upgrading with PeopleSoft Application Designer," Setting Report Options, page 13.	Not required. The default is 1.

Parameter	Description	Error Handling
-CMXML	Generate browser reports (0 or 1). This command enables you to enable the option of generating browser reports written to your report output directory. This is equivalent to setting the Generate Browser Reports options on the Report Options tab on the Upgrade Options dialog box. Enter 1 to enable this option, and enter 0 to disable this option. Example: -CMXML 1 See Chapter 3, "Comparing Source and Target Definitions," Working with Browser Reports, page 32.	Not required. The default is 0.
-CMR [0 | 1]	Use 0 to disable, 1 to enable, the generation of the Composite Compare Reports. Parameter is only valid when used in conjunction with the -PJM option. Ignored otherwise.	Not required. If not used, then composite report disabled. Must also use –CROD and -CRDB options when using -CMR.
-CROD [directory path]	Set path for the Old Release Compare reports when generating Composite Reports (-CMR 1). Only valid when used in conjunction with the -PJM and -CMR 1 options, ignored otherwise.	If not set when generating composite reports (-CMR 1) then its an error condition, and processing should stop, and an error generated to the log file. Directory path can be a local directory, a mapped network directory, or a UNC path specification.
-CRDB [database name]	Pass the value of the Old Release Source Database name when generating Composite Reports. This value must match the Source Database name value from the Old Release Report for each definition type. This is to ensure the original old release report is valid and contains the expected data. If the old release report source database name for the current definition type does not match the passed value, then an error message is generated to the log file, but process continues for other definition types.	Not required.

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Example: Running an Upgrade Compare Process

Use this example as a guide for running an Upgrade Compare process:

*   Run a database Compare process against the source Microsoft SQL Server database, PTDMO, and the target database, PTTST.

*   Log process and error messages to c:\temp\compare.log.

*   Set the commit limit to 150.

*   Show the audit flag and DDL differences between databases.

*   Compare records, indexes, pages, queries, and process definitions.

*   Compare only English and Spanish translations.

*   Set the database compare type.

*   Set the target orientation to keep the customizations.

*   Compare by release 8.40.00.000.

*   Generate compare reports to the c:\temp\upgreports directory.

PSIDE.EXE −HIDE -CT MICROSFT -CD PTDMO -CO PTDMO -CP PTDMO -PJM PPLTOOLS -TD PTTST -TO PTDMO -TP PTDMO -QUIET -LF C:\TEMP\COMPARE.LOG -CL 150 -AF 0 -DDL 0 -OBJ 0,1,5,10,20 -LNG ENG, ESP -CMT 0 -TGT 1 -CBY REL Core 8.40.00.000 -ROD C:\TEMP\UPGREPORTS

Chapter 4

Working with Text Definitions and Text Files During Upgrades

This chapter provides an over view and discusses how to:

- Compare and Merge text definitions.

- Set merge properties.

- Run a Project PeopleCode diff/merge.

Understanding Comparing Text Definitions and Text Files

PeopleSoft Application Designer enables you to compare the same text definition shared between two databases (or one database and a file) as well as the same text file used by different PeopleSoft releases. Similar to the Visual Compare interface for pages, you can view the text definitions or files side-by-side while the system detects each difference and clearly indicates the differences using visual queues. During this comparison, you choose which lines from each file or definition to carry forward into the merged version.

Note. The merge process and interface is identical for all text definitions and text files.

Text definitions are Application Designer definitions that are comprised of text, or code. They are:

- PeopleCode

- SQL

- HTML

- XSLT

Text files refer to text files used to store program logic or configuration settings within the PeopleSoft system. They are:

- COBOL files (.CBL).

- Configuration files (.CFG).

- Data Mover script files (.DMS).

- Initialization files (.INI).

- SQR source files (.SQC).

- SQL files (.SQL).

- SQR report files (.SQR).

Comparing and Merging Text Definitions and Files

This section discusses how to:

- Run the merge process for text definitions.

- Run the merge process for external text files.

- Use the merge interface.

Running the Merge Process for Text Definitions

To run the merge process for text definitions:

1. Launch the Upgrade Definition Type window for a text definition.

2. Select the definition you want to compare and merge.

3. Right-click, and select Merge Definition.

4. Select one of the following:

   - Database. Select this option if the definition to which you are comparing exists in another database. The system prompts you to sign on to the other database.

   - File. Select this option if the definition to which you are comparing exists in a project file. The system prompts you to navigate to the project file.

5. After selecting what you want to be the result of the final merge, click Save.

Running the Merge Process for External Text Files

To run the merge process for a single pair of external text files:

1. Select Tools, Diff / Merge External Text, Files.

2. In the To Merge File 'A': dialog box, navigate to, and select the file you want to merge, and click Open.

   Typically, the 'A' file is the file that is either older or contains less lines to merge into the most current file.

3. In the To Merge File 'B': dialog box, navigate to, and select the file you want to merge, and click Open.

   Typically, the 'B' file is the file that is most recent and contains more of the lines you want to remain in the resulting merged file.

To run the merge process for multiple pairs of external files:

1. Select Tools, Diff / Merge External Text, Folders.

2. In the Merge Folder dialog box navigate to and select the appropriate directory for Folder A: and Folder B:.

    How you have the options set on the Merge Properties dialog box, determines to which directory the system saves the merged results.

3. Select Include sub-folders if you intend to compare multiple sub-folders within one directory, otherwise, the system only compares and merges files in the immediate directory specified.

4. Click OK.

Using the Merge Interface

The merge interface displays three windows: the A: window, the B: window, and the Output window.

Merge interface for a text definition

Merge interface for an external text file

Working with the A: and B: Windows

Text Type	Description
Text definition	The A: window displays the definition existing in the database to which you are currently signed on. Code that appears only in this definition appear in the color specified in the Merge Properties for A:. The label of the A: window adheres to the following syntax: A: Database '<Database Name>' The B: window displays the definition existing in the database or file to which you are comparing the definition existing in database A:. Code that appears only in this definition appear in the color specified in the Merge Properties for B:. The label of the B: window adheres to the following syntax: B: <Database/File> '<Database/File Name>'

Text Type	Description
External text file	The A: window displays the text file specified in the To Merge File 'A' dialog. Code that appears only in this file appears in the color specified in the Merge Properties for A:.
	The label of the A: window adheres to the following syntax:
	A: <file path>
	The B: window displays the text file specified in the To Merge File 'A' dialog. Code that appears only in this text file appears in the color specified in the Merge Properties for B:.
	The label of the B: window adheres to the following syntax:
	B: <file path>
	Note. If you are comparing and merging multiple files in a directory structure (using the Folders option), you view individual pairs of files by selecting them in the Folder Merge Diff List window.

Note. In the context of the merge feature, there is not necessarily a concept of "source" and "target." Assigning an "A" and "B" value is used only to distinguish the different locations of definitions and external text files.

Working with the Output Window

The output window displays what will be the finished result of the merge after clicking Save.

 Initially either the A: or B: definition view will appear, depending on what you selected as the Initial Output View in the Merge Properties dialog. The Initial View window label displays the value you selected.

The output window label also displays the Save To value, which represents the location in which the merged results will be saved.

You can perform simple editing of a line in a text definition appearing in the output window, but you cannot add new lines.

Note. The Merge tab of the PeopleSoft Application Designer output window, displays any PeopleCode compile syntax errors. The merged result cannot be saved if there are syntax errors.

Note. While there is an output window for the merge feature, the output window for the PeopleSoft Application Designer is also visible.

Note. PeopleSoft Application Designer does not provide a method for you to track the change history of a text definition or external file. Developers must keep track of the changes made during the merge process.

Moving Lines of Code into the Output Window

↷	Click the arrow button to insert lines of code from window A: or B: into the output window. This button only appears next to lines of code in the A: and B: windows that are unique to that definition or file.
A✗	Click this button to remove from the output window lines of code that exist only in the A: definition or file.
B✗	Click this button to remove from the output window lines of code that exist only in the B: definition or file.
⬆ ⬇	Use the Previous Difference and Next Difference buttons to navigate quickly between the differences flagged within the active window.

Saving Merged PeopleCode

After you are satisfied with PeopleCode in the output window that you have merged, click Save to save the changes to the database specified as the Save Output Destination.

After you have successfully saved the merged PeopleCode, to view the merged PeopleCode as it appears in the Saved Output Destination, click the line in the output window indicating that the PeopleCode was successfully saved.

Saving Merged External Files

After you are satisfied with the content of the output window, click Save to save the changes to the file specified as the Save Output Destination in the Merge Properties. To view the results, navigate to the directory containing the file and open it using the appropriate program.

Working with Merge Properties

This section discusses how to:

* Access the Merge Properties dialog box.

* View and set merge properties.

Accessing the Merge Properties Dialog Box

You access the Merge Properties dialog box after first running the merge process. Then you select File, Definition Properties.

If you change any properties, and click OK, PeopleSoft Application Designer applies those to the current merge results. Your merge property changes are applied to all future merge results.

Viewing and Setting Merge Properties

This section discusses how to:

- Set Merge properties.

- View "A" and "B" properties.

Setting Merge Properties

Access the Merge Properties dialog box and select the Merge tab.
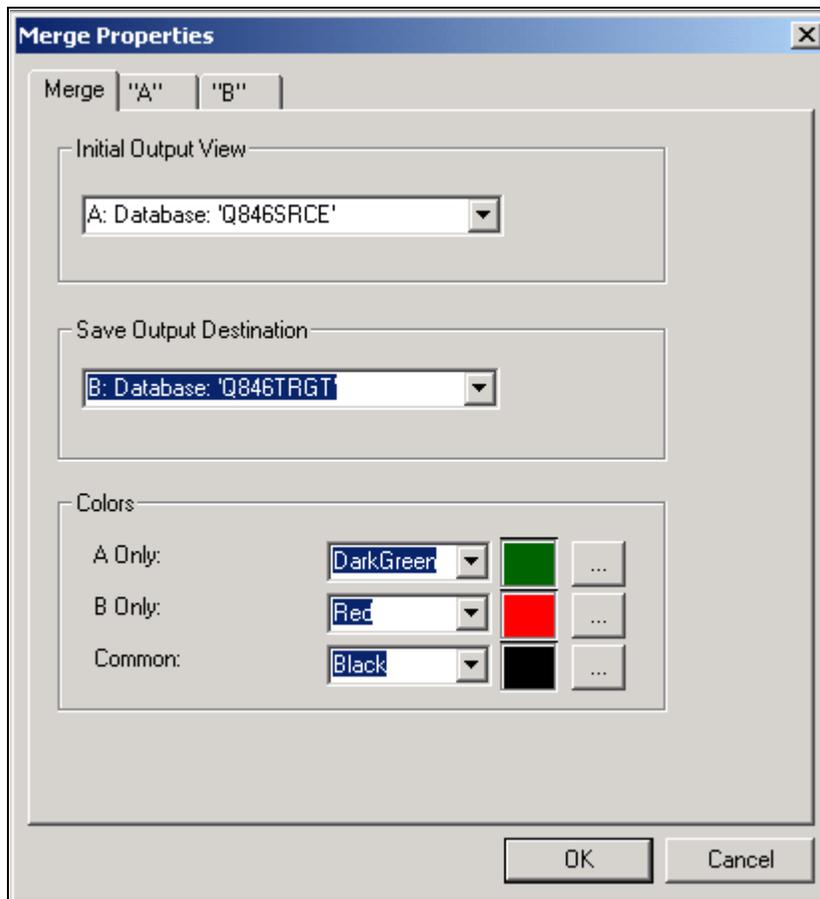
Merge Properties dialog box: Merge tab

Initial Output View   Select the definition you want to appear in the output window of the compare interface. Typically, you set the Initial Output View to contain the definition that would have the most modifications to accept. Either "A" or "B" can be selected.

Save Output Destination	Select the location where the system saves the contents of the merged output window. The location you select appears on the title bar of the output window.
	Note. You cannot save the output to a file.
Colors	Specify the colors that the system should associate with each definition to enhance readability. • A Only: Select the color to attribute to text that appears only in definition A. • B Only: Select the color to attribute to text that appears only in definition B. • Common: Select the color to attribute to text that appears in definition A and B.

View "A" and "B" Properties

Access the Merge Properties dialog box and select either the "A" or "B" tab.
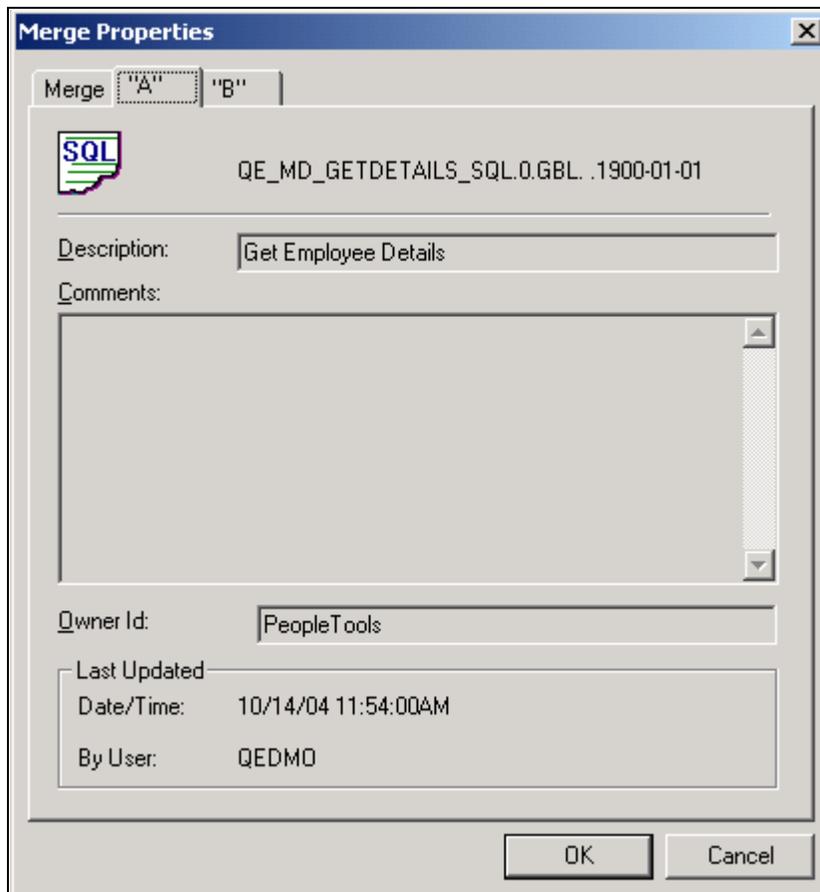
Merge Properties dialog box: "A" tab

The "A" and "B" tabs display the properties for the current A and B definitions, respectively. These settings are read-only.

Note. PeopleCode definitions do not possess description or Owner ID properties, so these properties appear blank for PeopleCode definitions.

Running a Project PeopleCode Diff/Merge

This section provides an overview and discusses how to .

•   Run a Project PeopleCode Diff/Merge.

•   Use the Project PeopleCode Diff/Merge interface.

Understanding the Project PeopleCode Diff/Merge

Running a Project PeopleCode Diff/Merge enables you to compare all the PeopleCode definitions in your upgrade project with another database or file simultaneously. If you have numerous PeopleCode definitions to compare and merge, this feature can save you time.

Note. The Project PeopleCode Diff/Merge feature is only available for PeopleCode definitions. For SQL, HTML, and XSLT definitions, you need to merge each definition separately.

Running a Project PeopleCode Diff/Merge

To run a Project PeopleCode Diff/Merge:

1.   Select Tools, Diff/Merge Project PeopleCode.

2.   Select either:

•   Database: select this option if you are comparing definitions with another database. The system will prompt you to sign on to the appropriate database.

•   File: select this option if you are comparing definitions existing in a file. The system will prompt you to navigate to the appropriate file.

Using the Project PeopleCode Diff/Merge

After running the Project PeopleCode Diff/Merge process a blank merge interface appears and the PeopleCode Diff List window appears at the bottom of the Application Designer workspace.

Project Q846SRCE PeopleCode Diff List	
Item	**Diff**
1	ACCESSLOGQRYWRK.URL_1.RowInit (Record PeopleCode)	different (A: Database 'Q846SRCE' is more recent)
2	AEREQUESTPARM.AE_BIND_VAR.FieldChange (Record PeopleCode)	different (A: Database 'Q846SRCE' is more recent)
3	QE_ABSENCE_HIST.QE_ABSENCE_TYPE.SaveEdit (Record PeopleCode)	identical

PeopleCode Diff List

The Item column contains the reference to every PeopleCode definition in the project.

The Diff column indicates whether the comparison between the two definitions uncovered any differences. If there is no difference between the two definitions, the word "identical" appears in the Diff column. If there are differences between the two definitions, the word "different" appears in the Diff column, and indicates which definition is more recent. If the definition appears in only one location, the Diff column text will read "A only" or "B only." If the definition is not present in either location the Diff column text will read "Absent in both."

When differences are found, the system highlights the row in red also. A and B only lines appear in blue.

Double-click a row in the PeopleCode Diff List to populate the merge interface above and view the differences between the two definitions.

See Also

Chapter 4, "Working with Text Definitions and Text Files During Upgrades," Using the Merge Interface, page 59

Filtering the Project PeopleCode Diff List

When working with numerous PeopleCode definitions, for ease of use you may need to reduce the number of rows appearing in the diff list. To filter what appears in the diff list, select or deselect these items from the View menu.

Show Identical Items	Show items that are identical in both data sources.
Show A-Only Items	Show items that exist only in the A: data source.
Show B-Only Items	Show items that exist only in B: data source.
Show Different Items	Show items where a difference is found between the two data sources.
Show Absent Items	Show items where a definition is absent in either data source.

Chapter 5

Copying Projects and Definitions

This section contains an overview and discusses how to:

• Review upgrade settings.

• Copy projects.

• Copy Definitions for upgrade using the command line.

• Stamp the target database.

• Reuse projects.

Reviewing Upgrade Settings

After your project is populated with definitions and has been compared (if applicable), review it and check the upgrade settings before copying it. To reduce the number of definitions through which you must search, filter out the information that you don't need to see by setting your view options. Afterwards, you can adjust the default upgrade settings.

This section discusses how to:

• Select view options.

• Select custom view options.

• Override upgrade defaults.

• Record upgrade settings.

Selecting View Options

Filter your view of the upgrade definition window by selecting one of the options in the View, Filtering menu. These same options are available in the upgrade pop-up menu in the Filtering menu. The options are:

No Filtering	Select to display all definitions.
Tagged for Upgrade	Select to display only definitions with the Upgrade check box selected.
Not Tagged for Upgrade	Select to display only definitions with the Upgrade check box cleared.

Done	Select to display only definitions with the Done check box selected.
Not Done	Select to display only definitions with the Done check box cleared.
Custom Filtering	Select to open a dialog box in which you can specify which definition status combinations to display.

When you apply a filter, the filter type appears in the bar above the upgrade columns.

Selecting Custom View Settings

Select View, Filtering, Custom Filtering to access the Custom Filtering dialog box, which includes a matrix that is similar to that found on the Report Filters tab in the Project Properties dialog box.

Custom Filtering

Select the definition status combinations to display in the upgrade definition window.
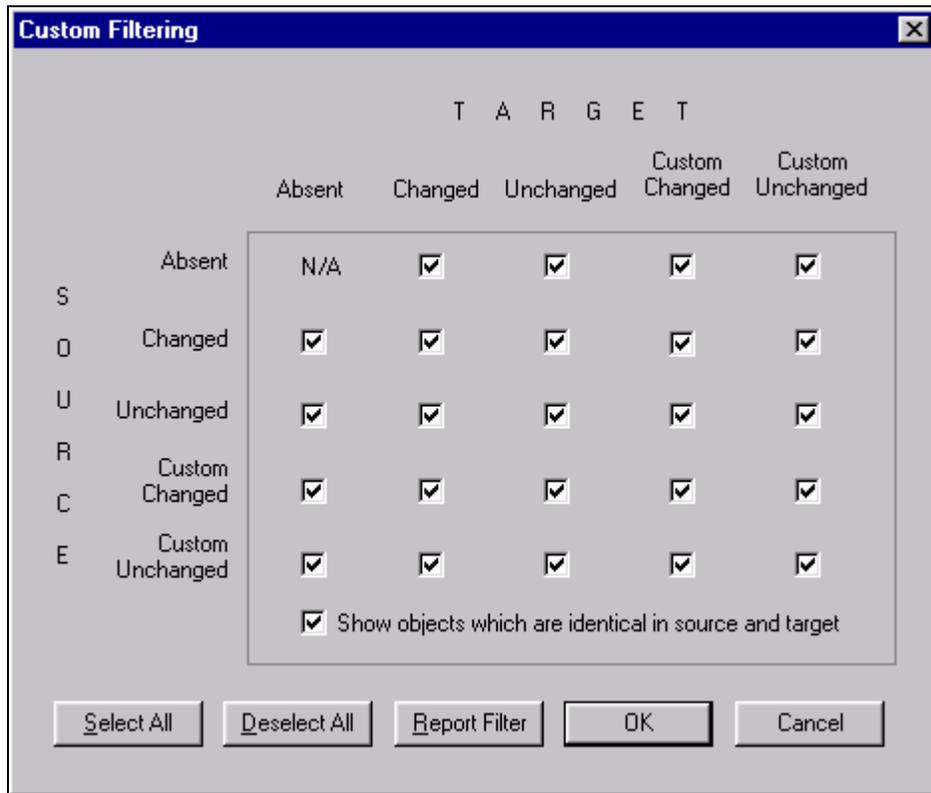
Custom Filtering dialog box

| **Report Filter** | Click to set these options to be the same as your settings on the Report Filter tab in the Project Properties dialog box. |

Show objects which are identical in source and target	Select to display definitions with a status combination of Same and Same. This status combination is possible only if you performed a project comparison and if definitions in the project were defined the same way in the source and target. You can never have a Same and Same status combination for definition types on which you performed a database comparison.

Overriding Upgrade Defaults

After reviewing your project and its compare reports, you can override the default upgrade column values for any definitions by changing the Upgrade and Action values.

For example, to preserve a definition that PeopleSoft Application Designer plans to delete from the target (Action is *Delete* and the Upgrade check box is selected) change the Upgrade value. You can also remove a definition from the project. This does not delete the definition from the database.

Overriding defaults helps if you want to propagate deletions from one database to another.

This section discusses how to:

• Specify whether action is taken on a single definition.

• Specify whether action is taken on a group of definitions.

• Specify which action is performed on a definition during a copy.

• Remove a definition from a project.

• Select and tag definitions for copying or deleting.

Specifying Whether Action is Taken on a Single Definition

To specify whether action is taken on a single definition, select or clear the definition's Upgrade check box.

When the Upgrade check box is selected, the displayed action is performed when you copy the project. If the check box is cleared, no action is taken.

Specifying Whether Action is Taken on a Group of Definitions

To specify whether an action is taken on a group of definitions:

1. Select a group of definitions.

   Use the Ctrl and Shift keys, or select all definitions in the upgrade definition window by clicking the top, left-hand cell of the grid.

2. Right-click one of the definitions and select one of these options:

- Tag for Upgrade

  Select to select the Upgrade check boxes for all of the selected definitions.

- Untag for Upgrade

  Select to clear the Upgrade check boxes for all of the selected definitions.

Specifying Which Action is Performed on a Definition During a Copy

To specify which action is performed on a definition during a copy:

1. Click the Action cell of the definition.

   This activates a drop-down list box in the cell.

2. Select *Copy* or *Delete* from the drop-down list box.

Remove a Definition From a Project

To remove a definition from a project, select the definition and press Del.

Selecting and Tagging Definitions for Copying or Deleting

To select and tag definitions for copying or deleting:

1. Select the definition rows.

2. Right-click one of the definitions and select Set Action.

3. Select *Copy* or *Delete.*

   Your selected definition reflects this change in the Action column. When you upgrade the project, it is copied or deleted from the target database.

   You can also select *Set Action for Project* to tag all of the definitions in a project for a selected action.

Recording Upgrade Settings

After you change the default upgrade settings, save the project. You might also want to print a hard-copy record of the project in its current state. You can rerun the Compare process (as a project compare) to regenerate new upgrade reports, or you can print the contents of the upgrade definition window to save a high-level view of the project.

This section discusses how to:

- Regenerate upgrade reports.

- Print the contents of the upgrade definition window.

Regenerating Upgrade Reports

To regenerate upgrade reports:

1. Set up the reporting filter.

2. Perform a project comparison.

   A project comparison compares only the definitions in the project, not the action and upgrade settings. Your project contents are not altered unless record fields have changed in the target database, in which case the corresponding changes are made in the project.

   This comparison generates new upgrade reports that reflect the configured action and upgrade settings.

Printing the Contents of the Upgrade Definition Window

To print the contents of the upgrade definition window:

1. Open the upgrade definition with the appropriate definition type displayed.

   To do this, select the appropriate folder in the upgrade view.

2. Select File, Print.

   The print job is automatically in landscape format.

Copying Projects

This section provides an overview of project copy options and discusses how to:

• Copy projects to a target database.

• Copy a project to a file.

• Copy a project from a file.

Note. When upgrading from one database to another some migrated images may not display in a browser. To remedy this situation manually clear the cache files in your browser after the project is copied. For more information about clearing the browser cache, refer to the documentation for your internet browser version.

The Copy Project from File and Copy to Project to File menu items are available only to users who have upgrade security or read-only access to the database. If these menu items are not available to you, contact your system administrator to update your security profile.

Understanding Project Copy Options

There are two ways to copy projects to another database:

• Copying a source project directly to a target database to which you are connected.

- Copying a source project to a file and then copying the file to a target database.

  This feature provides more flexibility in moving PeopleTools definitions and projects across databases. To move definitions to another database, you copy definitions to a target directory and files instead of another database. The directory and files can be local or reside on a file server. These files then become the source when copying a project from a file. Note, however, that not all definition types that are supported by the Copy to Database process are supported by the Copy to/from File processes. Those that are not supported must be migrated using Copy to Database.

  See Chapter 2, "Upgrading with PeopleSoft Application Designer," Definition Types That You Can Upgrade, page 4.

Copying Projects to a Target Database

Follow this procedure to copy a project to a target database.

To copy a project:

1. (Optional) Lock target database definitions.

    Before PeopleSoft Application Designer replaces or deletes a definition in the target database, it checks to determine whether the definition has a change control lock applied. If so, PeopleSoft Application Designer takes action on that definition if it has been locked by the same user ID that is performing the copy. Consequently, the speed of a copy might be slow because every definition to be deleted or replaced in the target must be checked.

    You can avoid the performance degradation by locking all of the database definitions in the target database by using the Change Control Administrator dialog box. This sets a flag telling PeopleSoft Application Designer not to check the lock status of every definition. When all target definitions are locked, the copy is faster.

2. Deactivate all system tracing.

3. Select Tools, Copy Project, To Database from the PeopleSoft Application Designer toolbar.

    The Target Signon dialog box appears, prompting you to sign in to a target database.

4. Sign in to the target database as you do with any PeopleSoft database.

    The Copy dialog box appears.

5. In the Copy dialog box, specify the types of definitions to copy and start the Copy process.

6. (Optional) Select the Reset Done Flags check box.

    Any definition with a selected Done check box is not copied. The first time that you copy a project, all Done check boxes are cleared. When you're repeating a copy due to problems found the first time, however, you might want to clear the Done check boxes of definitions that were copied incorrectly. Clear all project Done check boxes from the Copy dialog box by selecting Reset Done Flags. This option is selected by default.

7. (Optional) Select the Copy Project Definition check box.

    If you select this check box, the project definition is copied to the target database.

8. Select the definition types to copy.

   Only the definition types that exist in the project are displayed in the Object Type(s) list. To select all types, click Select All. You can also copy one definition type at a time (repeat this procedure each time).

   Note. If you copy definition types individually, copy them in the order in which they're presented in the dialog box. For instance, start with records, then indexes, and so on.

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9. Click Copy.

   As the Copy process runs, a progress indicator appears on the status bar of the dialog box, displaying the definition type, the total number of definitions to copy, and the number copied so far.

10. After the copy completes, check for messages.

    If you find any problems, correct them and repeat the copy.

11. Stamp the database.

    To track the history of the configuration upgrades, PeopleSoft recommends that you stamp the target database after each copy.

Copying a Project to Multiple Databases

When copying a project to multiple databases, or multiple PeopleSoft systems, use one of the techniques described in this section to ensure that version numbers remain in the correct sequence.

- Sign off and re-sign onto Application Designer between each project copy to a new environment. This ensures the target environment version is being incremented for each copy. If you do not sign off and re-sign onto the system, the version from the previous target environment will be incremented in the next target environment, which may result in a version discrepancy.

- Use Change Assistant. You can do this in either Update mode or Upgrade Mode. In Update mode, create multiple Change Packages and apply them individually, selecting the target environment each time in the Apply Wizard. Your target environments must be registered on an EMF hub. In Upgrade mode, create multiple jobs and run them individually by opening and running each job. When creating the job, the target environment is specified.

- Create a batch file with multiple PSIDE command lines: one for each system.

Copying a Project to a File

To copy a project to a file:

1. Open the project that you want to copy.

2. Select Tools, Copy Project, To File.

   The Copy File dialog box appears.

3. Select the objects that you want to copy, and enter the output directory.

4. Click Copy.

    If the file already exists, a confirmation dialog box appears asking if you want to overwrite the existing project. Select Yes to continue and overwrite project or No to cancel the Copy process.

    The Progress dialog box shows the progress of the Copy process as it copies each definition in the project to the specified directory. If you click the Cancel button, the system cancels the Copy process. Any files that were created by the Copy process are removed from the specified directory. To continue copying a project, restart the Copy process if it was canceled.

    When the Copy process completes successfully, a directory with the same name as the current project is created under the specified export directory. This directory contains the PeopleTools definitions and project definition in XML file format.

    Note. Index key fields are not copied to the project file in certain cases when the session language set in Configuration Manager *does not* match the base language for your installation. For best results, set your session language to match the base language before performing a project copy to file.

Copying a Project From a File

The Copy Project From File command in the Tools menu imports PeopleTools definitions and the project definition from a file that was previously copied by using the Copy To File feature.

This section discusses how to:

*   Track fixed incidents.

*   Copy a project that does not exist in the database from a file.

*   Copy a project that does exist in the database from a file.

Tracking Fixed Incidents

When PeopleSoft delivers a software update, it is in the form of a change project file. This project file usually includes enhancements or updates that fix incidents. You can view incident IDs and their dependencies before you copy the file to the target database.

To view incident IDs that were included in the project file:

1. Open the maintenance project that you are planning to copy to the database.

2. Click the Project Properties button.

3. Select the Update IDs tab.

    This tab contains a list of update IDs that were fixed and applied to the software.

4. Select the Pre-Requisites tab.

    This tab contains a list of update IDs that are dependent on other fixes that are being applied. These are validated against the target database when you copy the project. If a fix in the Pre-Requisites list has not been applied, a message appears, indicating that the target database is missing a dependency. The only way to have the system allow you to copy projects that have dependencies that are not applied is to select the Override Pre-Requisites check box.

    Note. We can track applied update ID fixes only through the Copy Project From File command in the Tools menu. Therefore, every update ID fix that PeopleSoft delivers is in a change project that must be copied to your database.

See *PeopleTools 8.52: Change Assistant*, "Working with Change Packages."

Copying From a File a Project That Does Not Exist in the Database

To copy a project from a file:

1. Select Tools, Copy Project, From File.

    The Copy From File: Select Project dialog box appears.

2. Browse to locate the project file or select the file from the Projects list.

    Note. You can use the Open button to open folders while browsing. It does not open the project file and begin the copy process.

    You can copy only one project from a file at a time.

3. Select the project from the projects list by clicking Select or double clicking the project name.

    The Copy From File dialog box appears.

4. Select whether to use the project definition from the file or the database, and click OK.

5. Select the definition types to copy.

    The Definition Type(s) list shows the definition types that have been exported and are available to be copied into the database.

6. Select the Override Pre-Requisites check box if required.

    You can select the Override Pre-Requisites check box if you want the system not to check for project prerequisites and apply the project regardless of prerequisites that have not been applied.

7. Click Copy.

    There are two phases to the Import process: content on the XML file is written to the system cache
    directory (as specified in the PeopleSoft Configuration Manager) under a stage directory for the current
    database. Then the cache is copied to the database. When the import is complete, the cache files are
    deleted.

    The Progress dialog box shows the progress of the Copy process as it copies each definition from the
    export directory into the attached database. When the Copy from File process successfully completes, the
    system creates a new project definition from the PeopleTools definitions in the current database.

    If you click the Cancel button before copying the project, the project becomes invalid and the system
    deletes the project reference from the database.

Note. When copying application packages and Portal Registry Structures, the Progress dialog box may
display unexpected counting behavior, making it appear that definitions are being processed more than once.
This behavior is expected.

Copying From a File a Project That Does Exist in the Database

The process for copying a project from a file when a project of the same name exists in the database is
slightly different. After selecting Tools, Copy Project, From File and a project of the same name already
exists in the database to which you are currently signed on, the following dialog box appears.
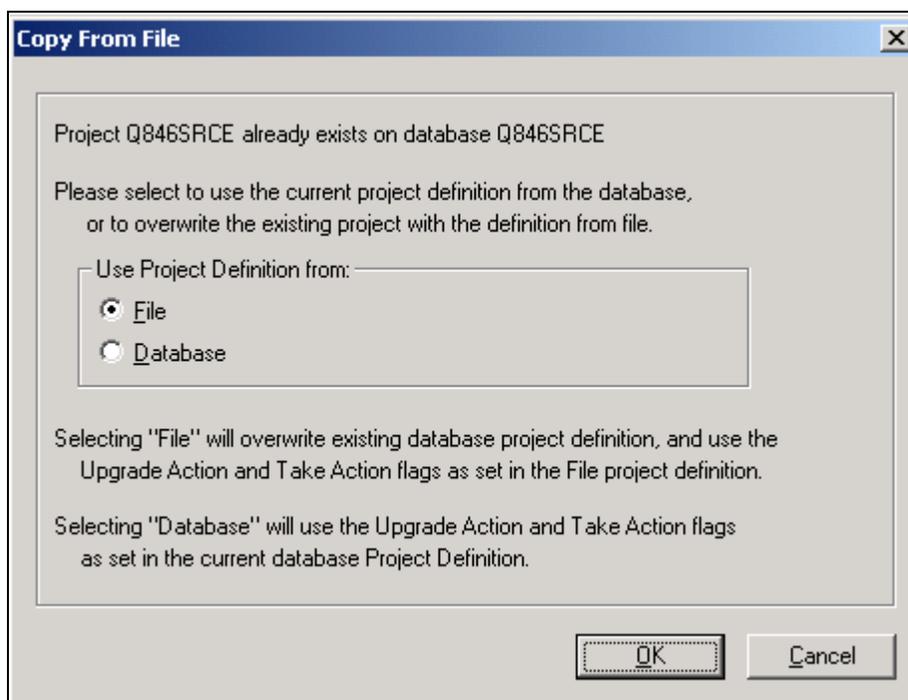
Copy From File: prompting for project definition location

This prompt enables you to specify which project definition to use, the one stored in the database to which
you are signed on or the one stored in the file from which you intend to copy. Keep in mind that the project
definition is the metadata of the project and determines which definitions (pages, fields, records, and so on)
are members of the project.

File   Select this option if you intend to copy the project stored in the file
                                            regardless of any Upgrade Action or Take Action settings in the database.

                                            Note. By selecting this option, you overwrite the project definition of the
                                            same name that previously existed in the database.

                                            Important! After selecting File and clicking OK, the second Copy From
                                            File dialog box appears where you can view source and target information,
                                            select Definition Types, select copy options, and so on. If you select Cancel
                                            from this dialog box, the project file does not get copied into the database,
                                            however, the existing project definition *will be deleted from the database.*

Database   Select this option if you intend to maintain control of the upgrade project
                                            definition stored in the database and manually override any Upgrade Action
                                            or Take Action settings.

Copying Definitions for Upgrade Using the Command Line

Use the same command line syntax as identified previously to copy definitions.

See *PeopleTools 8.52: PeopleSoft Application Designer Developer's Guide*, "Using Command Line
Parameters," Understanding PeopleSoft Application Designer Command Line Parameters.

Use the command line statement for Upgrade Copy processes to:

*   Connect to the source database.

*   Connect to the target database.

*   Copy the project and its objects from the source database to the target database.

    If the same project already exists in the target database, you can set the option to overwrite the older
    project with the new project.

Available Parameters

The following table lists all available parameters for the upgrade copy statement:

Parameter	Description	Error Handling
-HIDE	Use to hide the PeopleSoft Application Designer interface. Always use this parameter when performing a command line Copy process.	Required for all project command line processes.

Parameter	Description	Error Handling
-CT	Source database type. Enter the type of source database to which you are connecting (for example, ORACLE, SYBASE, and so on).	Required. If the process stops, error messages are written to the log file (if the log file name parameter is specified).
-CS	Source server name. Enter the name of the source database server for the database to which you're connecting.	Required for some database types. If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-CD	Source database name. Enter the name of the source database to which you're connecting, as you would enter it into the PeopleSoft Login dialog box.	Required. If you do not supply this parameter, the process stop and error messages are written to the log file (if the log file name parameter is specified).
-CO	Source user ID. Enter the PeopleSoft user ID to use to sign in to the source database.	Required. If you do not supply this parameter, the user ID is taken from the registry. If it fails, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-CP	Source user password. Enter the password for the specified user ID for source database.	Required. If you do not supply this parameter, the PeopleSoft Login dialog box prompts the user to give the valid password. If it fails, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-TS	Target server name. Enter the name of the target database server for the database to which you're connecting.	Required for some database types and for a Database Copy process (but not used for a Copy To File or Copy From File process). If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).

Parameter	Description	Error Handling
-TD	Target database name. Enter the name of the target database to which you're connecting, as you would enter it into the PeopleSoft Login dialog box.	Required for a database Copy process (but not used for a Copy To File or Copy From File process). If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-TO	Target user ID. Enter the PeopleSoft user ID to use to sign in to the target database.	Required for a Database Copy process (but not used for a Copy To File or Copy From File process). If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-TP	Target user password. Enter the password for the specified user ID for the target database.	Required for a Database Copy process (but not used for a Copy To File or Copy From File process). If you do not supply this parameter, the process stops and error messages are written to the log file (if the log file name parameter is specified).
-LF	Log file name. Enter the name of the file in which error messages are logged during the command line Upgrade Copy process.	Not required. If you do not supply this parameter, a file is created with the specified path and name, and all of the processing and error messages are written to that file.
-PJC	Source project name. Enter the name of the project that is to be copied from the source database to the target database. This project should be available in the source database before starting the command line Upgrade Copy process to target database.	Required for a Database Copy process. This is the main parameter that is used internally by the executable file to identify an Upgrade Copy process. If you do not supply this parameter and if you supply all of the source database login parameters, the executable file starts the application.
-PJTF	Copy Project To File project name. Enter the name of the project to be copied from the source database to the file.	Required for a Copy To File process. Do not include the file path to the project with this parameter. Use -FP to specify the file path.

Parameter	*Description*	*Error Handling*
-PJFF	Copy Project From File project name. Enter the name of the project to be copied from the file into the source database.	Required for a Copy From File process. Do not include the file path to the project with this parameter. Use -FP to specify the file path.
-FP	Project file path. Enter the path to the project for a Copy to File or Copy From File process.	Required for a Copy To File or Copy From File process (but not for a Database Copy process). For the Copy From File process, the directory must exist. For the Copy To File process, any project with the same name is overwritten unless you use the -OVW parameter. A directory specification is created if it does not exist. Do not include the name of the project in the file path. Use -PJTF or -PJFF to specify the project name.
-OVD	Override dependencies (0 or 1). Enter 1 to override the checks for unapplied dependency incidents during the Copy From File process and to perform the copy even if the project's dependency incidents have not been applied to the source database.	Not required, and not applicable for processes other than the Copy From File process. The default is 0. When you enter the default and if the project's dependency incidents have not been applied to the source database, an error message is written to the log file listing which incidents need to be applied. The Copy From File process also stops. When you enter 1, a warning message is written to the log for unapplied incidents and processing continues.
-CL	Commit limit. Enter the Commit limit (a number greater than 0) for the number of objects to be copied or compared before a commit is issued. Example: -CL 150	Not required. The default is 50 if the user does not set this parameter.
-AF	Audit flags on records (0 or 1). Enter 1 to keep the target audit flags as is. Enter 0 to take them from the source database. Example: -AF 0	Not required. The default is 1.

Parameter	*Description*	*Error Handling*
-DDL	Data definition language (DDL) on records and indexes (0 or 1). Enter 1 to keep the target database DDL flags as is. Enter 0 to take them from the source database. Example: -DDL 0	Not required. The default is 1.
-PPL	Portal registry structures permission list references. Enter 1 to keep the target portal registry permission list references as is. Enter 0 to take them from the source database.	Not required. The default is 1.
-EXP	Export project definition (0 or 1). Enter 1 to export the project definition to the target database when using the Database Copy process. Not applicable for Copy Project to File process.	Not required. The default is 1. Any project with the same name is overwritten with the new project definition.
-OBJ	Object types to copy List the object types as numbers with commas as delimiters. For example, if you choose records and indexes alone for copying, use the appropriate numbers for records and indexes from the Definition Type Selection table. For records, the number is 0, and for the indexes, the number is 1. Example: -OBJ 0,1	Not required. If you do not supply this parameter, then all of the objects are copied by default.
-RST	Reset done flags (0 or 1). Enter 1 to reset the done flags before initiating the Copy process. Enter 0 to not reset them. Example: -RST 0	Not required. The default is 1.

Parameter	Description	Error Handling
-OVW	Overwrite existing project (0 or 1). Enter 1 to overwrite any existing projects with the same name in the specified path during the Copy Project To File process, or in the database in the Copy Project From File process. Enter 0 to not overwrite existing projects. This applies to the Copy Project To and From File processes only.	Not required. The default is 1.
-LNG	Copy languages. List the language codes with commas as delimiters, or enter ALL to select all available languages. For new languages that are not listed in the Language Selection table, use the xlat short name from the LANGUAGE_CD field in the translate table. For example, if you choose English and Spanish for copying, enter the appropriate codes for English and Spanish from the Language Selection table. For English, the code is ENG, and for Spanish, the code is ESP. Example: -LNG ENG,ESP	Not required. If you do not supply this parameter, then the languages that are already set in the project are used as the default. The COMMON language code refers to nonlanguage attributes that are not translated. Translated attributes can be copied separately from nontranslated attributes. If you do not specify the COMMON code when using -LNG, you copy only the translated language attributes. Changing languages on the command line changes the values that are stored with the project definition. Subsequent Copy and Compare processes on the modified project use the new values unless they are explicitly changed again in the upgrade options.
-CFD	Keep Target ChartField PageField Display Size. (Number 1 or 0). This parameter indicates whether or not the target chartfield page field display size attributes are to be kept, or whether they should be set from source during copy. See Upgrade Options for more information. Enter 1 to keep the target chartfield page field display size attributes. Enter 0 to set these attributes from the source values.	Not required. Default is 1

Parameter	Description	Error Handling
-CFF	Keep Target ChartField Field Format. (Number 1 or 0) This parameter indicates whether or not the target chartfield field format attributes are to be kept, or whether they should be set from the source during Copy. See Upgrade Options for more information. Enter 1 to keep the target chartfield field format attributes. Enter 0 to set these attributes from the source values.	Not required. Default is 1

Example: Copying a Database

These are some command line statements for the Database Copy process:

- Copy the project PPLTOOLS from the source Microsoft SQL Server database, PTDMO, to the target database, PTTST.

- Log process and error messages to c:\temp\copy.log.

- Set the commit limit to 150.

  Copy the audit flags and record and index DDLs from the source database.

- Copy only records, indexes, pages, queries, and process definitions from the project.

- Do not reset the done flags before initiating the Copy process.

- Copy only English and Spanish translations.

PSIDE.EXE −HIDE -PJC PPLTOOLS -CT MICROSFT -CD PTDMO -CO PTDMO -CP PTDMO -TD PTTST -TO PTDMO -TP PTDMO -QUIET -LF C:\TEMP\COPY.LOG -CL 150 -AF 0 -DDL 0 -OBJ 0,1,5,10,20 -RST 0 -LNG ENG, ESP

Example: Copying To File

These are some command line statements for the Copy to File process:

- Copy the PPLTOOLS project from the Oracle database, PTDMO, by using the PTDMO user ID, to the local directory c:\temp\export.

  A directory named PPLTOOLS is created in c:\temp\export.

- Log progress and error messages to c:\temp\copy.log.

PSIDE.EXE −HIDE -PJTF PPLTOOLS -FP c:\temp\export -CT ORACLE -CD PTDMO -CO PTDMO -CP PTDMO -QUIET -LF c:\temp\copy.log

Example: Copying From File

These are some command line statements for the Copy From File process.

- Copy the PPLTOOLS project to the DB2 UDB for Linux, Unix, and Windows database, PTDMO, by using the user ID PTDMO, from the local directory c:\temp\export.

  A directory named PPLTOOLS must exist under c:\temp\export.

- Log progress and error messages to c:\temp\copy.log.

PSIDE.EXE −HIDE -PJFF PPLTOOLS -FP c:\temp\export -CT DB2UNIX -CD PTDMO -CO PTDMO -CP PTDMO -QUIET LF c:\temp\copy.log

Stamping the Target Database

After successfully copying a project into the target database, "stamp" it to reflect the fact that it has changed from its previous customer release level. This helps to identify modifications that you make after this version of the database.

Note. When upgrading to a new PeopleSoft release, this step is *required,* except that you stamp the database with the new PeopleSoft release level, as directed by the upgrade instructions on Customer Connection.

To stamp the target database:

1. Select Tools, Upgrade, Stamp Database.

   The Stamp Database dialog box appears.

   Use this dialog box to specify and stamp the database with a new customer release level.

2. Enter the appropriate PeopleSoft Release description, service pack level, and customer release value.

   Do not change the service pack level unless instructed to do so during a PeopleSoft delivered release upgrade.

   The new customer release value must be greater than or equal to the previous value.

3. Click Stamp.

See Also

PeopleTools 8.52: PeopleSoft Application Designer Developer's Guide, "Using Change Control," Change Control Stamping

Reusing Projects

PeopleSoft Application Designer enables you to reuse projects. To reuse a project, clear the Done check boxes for the definitions to be recopied. You might also want to validate the project integrity and delete invalid definitions. However, this is not necessary. During a copy, invalid definitions are reported and ignored.

This section discusses how to:

*   Validate project integrity.

*   Reset all Done check boxes.

*   Reset Done check boxes for a group of definitions.

*   Reset the Done check box for a single definition.

Validating Project Integrity

To validate project integrity:

1. Select Tools, Options.

2. Select the Validate tab.

    Use this tab to specify what kind of checks you want to perform during a project validation. This procedure discusses only project integrity validation.

3. Select the Validate project integrity check box.

4. Click OK.

5. Select Tools, Validate.

    A message appears, asking whether you want to delete and report invalid definitions or just to report them.

    Note. An invalid definition is any definition in the project with an Add or Replace action that does not exist in the database. PeopleSoft Application Designer does not act on definitions with a Delete action, because it assumes that you want to retain such definitions in the project—regardless of whether they still exist in the database—for the purpose of deleting the same definition in a target database.

Resetting All Done Check Boxes

To reset all Done check boxes, right-click in the upgrade definition window and select Reset Done Flag. To reset them for the entire project, select the Reset Project Done Flags option. You can also select Edit, Upgrade, Reset Project Done Flags from the main menu. All Done check boxes for all definitions in the project are cleared.

Resetting Done Check Boxes for a Group of Definitions

To reset Done check boxes for a group of definitions:

1. Select a group of definitions.

    Use the Ctrl and Shift keys, or select all definitions in the upgrade definition window by clicking the top, left-hand cell of the grid.

2. Right-click one of the definitions and select Reset Done Flag.

You can also select Edit, Upgrade, Reset Done Flag from the main menu. This clears all Done check boxes for the selected definitions.

Resetting the Done Check Box for a Single Definition

To reset the Done check box for a single definition, clear the Done check box for the definition.

Note. You can only manually *clear*Done check boxes. You cannot activate these check boxes yourself; they are automatically selected after a successful copy.

Chapter 6

Working With Alter Analyzer

This chapter provides an overview and discusses:

*   Loading metadata.

*   Running the analyzer.

*   Working with the alter repository.

Understanding the Alter Analyzer

In addition to PeopleSoft Application Designer compare features, you can also use the Alter Analyzer to compare the PeopleSoft record source and target metadata, gaining insight into an Alter operation. The Alter Analyzer does not compare all application metadata, just selected attributes, highly relevant to the application DDL.

In most cases, the Alter Analyzer will be used during PeopleSoft application upgrades, and specific instructions for setting this up appear in your PeopleSoft upgrade instructions and Change Assistant templates. The Alter Analyzer applies, for the most part, to the traditional PeopleSoft upgrade process referred to as "upgrade in place." The main focus of the Alter Analyzer is to enable you to determine the DDL implications of applying a change to the metadata. The change can be a new release (upgrade), but could also be a patch, a bundle, a maintenance pack, and so on.

The Alter Analyzer consists of two Application Engine programs that:

1. Load selected record metadata values from the database into a set of staging tables to create a 'base line' of your metadata, capturing a snapshot of the metadata at that time.

2. Compare the equivalent metadata attributes between the baseline and the target record metadata.

3. Record metadata differences between baseline and target record metadata in the alter repository for ongoing analysis.

A typical scenario when using the Alter Analyzer would be:

1. Run the metadata loading program to establish a baseline of the metadata.

2. Apply the metadata change(s).

3. Run the metadata analyzer program, and review the alter repository information.

Benefits of the Alter Anlyzer include:

- Insight into the alter process, which enables the upgrade process to become more fine-tuned. Designers of the PeopleSoft application upgrade process can use the Alter Analyzer (internally) to rearrange the alter process, making it more modular and flexible, which passes on improved performance to customers upgrading applications.

- A record of all metadata changes can be stored in the alter repository, which you can refer to, query, run reports against as needed, both during and after an upgrade.

- Improved visibility of important record metadata changes, especially if there is a large volume of record and record field definitions to be compared. With the alter repository, you can quickly access the most relevant changes related to DDL.

Note. While the upgrade process can involve various releases of PeopleTools, the Alter Analyzer is designed for and tested only on PeopleTools 8.50 and later versions.

See Also

Your PeopleSoft application upgrade documentation

Chapter 3, "Comparing Source and Target Definitions," page 23

PeopleTools 8.52: Application Engine, "Managing Application Engine Programs," Running Application Engine Programs

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Loading Metadata

In order to compare the source and target metadata, the selected record metadata attributes need to be extracted from the metadata tables. This creates a baseline of your metadata, against which you can compare changes. You load the metadata required for Alter Analyzer by running the PTALTDATLOAD Application Engine program. PTALTDATLOAD, runs against a subset of PeopleTools metadata tables, storing metadata related to record definitions into the metadata load PeopleTools tables.

Keep in mind that this process is designed for the "alter in place" upgrade process, where the source and target exist within the same physical database. PTALTDATLOAD runs against the current metadata tables, extracts the important record metadata attributes, and creates your metadata baseline. Then future alter processes can be compared against this baseline.

Metadata Load Table	*Description*
PS_PTRECDEFN	Stores selected values from source PSRECDEFN.
PS_PTRECFIELDDB	Stores selected values from source PSRECFIELDDB.
PS_PTDBFIELD	Stores selected values from source PSDBFIELD.
PS_PTOBJCHNG	Stores selected values from source PSOBJCHNG.
PS_PTOPTIONS	Stores selected values from source PTSOPTIONS.

Metadata Load Table	Description
PS_PTAEAPLTMPTBL	Stores selected values from source PSAEAPLTMPTBL.
PS_PTAEAPPLDEFN	Stores selected values from source PSAEAPPLDEFN.
PS_PTINDEXDEFN	Stores selected values from source PSINDEXDEFN.
PS_PTKEYDEFN	Stores selected values from source PSKEYDEFN.

Note. The metadata load tables exist in PeopleTools 8.50 and later version of PeopleTools.

Running the Alter Analyzer

After loading the metadata and creating a baseline, you would then begin applying metadata change(s). When doing so, you can periodically run the PTALTANLYZR Application Engine program, which compares metadata changes to the stored metadata (the baseline) and inserts differences into the alter repository.

Working with the Alter Repository

This section provides an overview and discusses:

• Alter repository table structure.

• Querying the alter repository.

Understanding the Alter Repository

The alter repository consists of a set of tables designed to store the results of the PTANALYZER program run, as well as some static information to be used for reference. Once the PTANALYZER program runs, the alter repository will contain information for each definition where metadata attributes differ between the source and target databases. Use a SQL editor or reporting application to query the repository and extract the information you require. This will require a working knowledge of the Alter Repository table structure.

The alter repository consists of these tables:

• PS_PTUALTRECDATA

• PS_PTUALTRECFLDDAT

• PS_PTUALTRECFLDDEF

The structure of the tables is described in the following sections.

PS_PTUALTRECDATA Table

The following table describes the fields in the PS_PTUALTRECDATA table.

Column Name	*Description*
PTUPG_SRECNAME	Source Record Name.
PTUPG_TRECNAME	Target Record Name.
PTUPG_STABNAME	Source Table Name.
PTUPG_TTABNAME	Target Table Name.
PTUPG_SRECTYPE	Source Record's Type.
PTUPG_TRECTYPE	Target Record's Type.
PTUPG_STMPTBLINST	Temp Table Instances count for Source temp table. (Applies only to temporary tables). Default value is 0.
PTUPG_TTMPTBLINST	Temp Table Instances count for Target temp table. (Applies only to temporary tables'). Default value is 0.
PTUPG_ALTACTION	Indicates the Alter action: A: Add Record (New) D: Delete Record RR: Rename Record CR: Record Added. DR: Record Deleted RR: Record Renamed AR: Alter Record with Field changes, Index changes, and Trigger changes. NA: Not applicable, Record with only Trigger, Index, or both changes. TC: Record type changed between source and target. Source table is a non-table (SQL View, Dynamic View, Derived/Work table, and so on) and in the Target the table is an actual SQL table (SQL Table, Temporary Table). TD: Record type changed between source and target.
PTUPG_IDXONLY	Indicates whether changes are only to indexes. 0: Default 1: Only Index Changes

Column Name	Description
PTUPG_TRGONLY	Indicates whether changes are only to triggers. 0: Default 1: Only Trigger Changes

PS_PTUALTRECFLDDAT Table

The following tables describes the fields in the PS_PTUALTRECFLDDAT table.

Column	Description
PTUPG_SRECNAME	Source Record Name.
PTUPG_SRECTYPE	Source Record Type.
PTUPG_SFLDNAME	Source Record.Field Name.
PTUPG_SFLDTYPE	Source Record.Field Name and Type. (Platform independent-PeopleTools field type).
PTUPG_SFLDLEN	Source Record.Field Name, Type, and .Length.
PTUPG_SFLDDECPOS	Source Record.Field Nam, Type, and Decimal Position.
PTUPG_SFLDNOTNULL	Source Record.Field Name, and Null ability. 0: Null 1: Not Null
PTUPG_SFLDDEFREC	Default Record Name.
PTUPG_SFLDDEFFLD	Constant (or) Default Record Name. Field Name.
PTUPG_SENCRYPT	(Applies only to Oracle databases using TDE.) Source Record.Field, Encryption. 0: No Encryption 1: Encryption
PTUPG_TRECNAME	Target Record Name.
PTUPG_TRECTYPE	Target Record, Record Type.
PTUPG_TFLDNAME	Target Record.Field Name
PTUPG_TFLDTYPE	Target Record.Field Name, and Type. (Platform independent-PeopleTools field type)
PTUPG_TFLDLEN	Target Record.Field Name, Type, and Length.

Column	Description
PTUPG_TFLDDECPOS	Source Record.Field Name, Type, and Decimal Position.
PTUPG_TFLDNOTNULL	Target Record.Field Name, and Null ability. 0: Null 1: Not Null
PTUPG_TFLDDEFREC	Default Record Name.
PTUPG_TFLDDEFFLD	Constant (or) Default Record Name. Field Name.
PTUPG_TENCRYPT	(Applies to Oracle databases using TDE.) Target Record Field .Encryption. 0: No Encryption 1: Encryption
PTUPG_ALTACT_A	Indicates whether the field is newly added or not. 0: Not an Added Field 1: Added Field (New)
PTUPG_ALTACT_D	Indicates whether the field is deleted or not. 0: Not a Deleted Field 1: Deleted Field
PTUPG_ALTACT_CT	Indicates whether the field type has changed. 0: No Change in Field Type 1: Change in Field Type
PTUPG_ALTACT_CL	Indicates whether the field length has changed. 0: No Change in Field Length 1: Change in Field Length
PTUPG_ALTACT_CD	Indicates whether the field decimal position has changed. 0: No Change in Field Decimal Position. 1: Change in Field Decimal Position.
PTUPG_ALTACT_CN	Indicates whether the field null ability has changed (Null/Not Null). 0: No Change in Null ability 1: Change in Null ability
PTUPG_ALTACT_CDR	Indicates whether the default record name has changed. 0: No Change in Default Record Name 1: Change in Default Record Name

Column	Description
PTUPG_ALTACT_CDF	Indicates whether the default field name has changed. 0: No Change in Default Field Name 1: Change in Default Field Name
PTUPG_ALTACT_CEN	(Applies only to Oracle databases using TDE.) Indicates a change in the field encryption. 0: No Change in Encryption 1: Change in Encryption
PTUPG_ALTACT_FR	Indicates whether a field has been renamed. 0: No Field Rename 1: Field Renamed

PS_PTUALTRECFLDDEF Table

This table is provided for reference purposes only. It displays the PeopleSoft field types and their default values per database platform. It is a static table, not used or updated by Alter Analyzer.

Column Name	Description
PTUPG_FIELDTYPE	PeopleSoft field type.
PTUPG_FLDTYPENAME	PeopleSoft field type name.
PTUPG_PLTFRM_ORA	Default value for Oracle databases.
PTUPG_PLTFRM_MSS	Default value for Microsoft SQL Server databases.
PTUPG_PLTFRM_DBX	Default value for DB2 LUW databases.
PTUPG_PLTFRM_DB2	Default value for DB2 z/OS databases.
PTUPG_PLTFRM_INF	Default value for Informix databases.
PTUPG_PLTFRM_SYB	Default value for Sybase databases.

Querying The Alter Repository

This section provides these examples to illustrate the type of information you can gather from the contents of the alter repository.

- Example: Fields Altered For Target Records

- Example: Source Records Deleted From Target

- Example: Source Records Renamed In Target

Example: Fields Altered For Target Records

This sample query illustrates how to determine which fields on a particular target record will be altered why.

```
SELECT
 PTUPG_TRECNAME,
 PTUPG_TFLDNAME,
 PTUPG_ALTACT_A,
 PTUPG_ALTACT_D,
 PTUPG_ALTACT_CT,
 PTUPG_ALTACT_CL,
 PTUPG_ALTACT_CD,
 PTUPG_ALTACT_CN,
 PTUPG_ALTACT_CDR,
 PTUPG_ALTACT_CDF,
 PTUPG_ALTACT_CEN,
 PTUPG_ALTACT_FR
FROM PS_PTUALTRECFLDDAT
WHERE PTUPG_TRECNAME LIKE 'JOB_CD_TBL'
```

Example: Source Records Deleted From Target

This sample query illustrates how to determine which records in the source database will be deleted from the target.

```
SELECT
 PTUPG_SRECNAME,
 PTUPG_STABNAME
FROM PS_PTUALTRECDATA
WHERE PTUPG_ALTACTION = 'DR'
```

Example: Source Records Renamed In Target

This sample query illustrates how to determine which records in the source database are being renamed in the target.

```
select
  PTUPG_SRECNAME,
  PTUPG_STABNAME,
  PTUPG_TRECNAME,
  PTUPG_TTABNAME
FROM PS_PTUALTRECDATA
WHERE PTUPG_ALTACTION = 'RR'
```

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