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PeopleSoft Enterprise Customer Relationship Management 8.8x to 9.0 MP5 Upgrade

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ORACLE

PeopleSoft Enterprise Customer Relationship Management 8.8x to 9.0 MP5
Upgrade
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About This Documentation

Understanding This Documentation

This documentation is designed to direct you through the process of upgrading to your new PeopleSoft release.

This section describes information you should know before you begin working with PeopleSoft products and documentation, including PeopleSoft-specific documentation conventions.

Prerequisites

You must complete the tasks in the document *Getting Started on Your PeopleSoft Upgrade* before beginning this upgrade. If you have not yet completed these tasks, do so now.

See PeopleSoft Customer Connection (Implement Optimize + Upgrade, Upgrade Guide, Upgrade Documentation and Software, Upgrade Documentation and Scripts).

Audience

This documentation assumes you have a basic understanding of the PeopleSoft system. One of the most important components of a successful upgrade of your PeopleSoft installation is your on-site experience.

You should be familiar with your operating hardware environment and have the necessary skills to support that environment. You should also have a working knowledge of:

- SQL and SQL command syntax.
- PeopleSoft system navigation.
- PeopleSoft windows, menus, and pages (and how to modify them).
- The World Wide Web.
- Microsoft Windows or Windows NT graphical user interface.

PeopleSoft recommends that you complete at least one PeopleSoft introductory training course before performing this upgrade.

See PeopleSoft Customer Connection (Oracle University).

Organization

This documentation is divided into chapters, each containing tasks that represent major milestones in the upgrade process:

- Prepare Your Database

- Apply PeopleTools Changes

- Run and Review Compare Reports

- Apply Application Changes

- Complete Database Changes

- Apply Changes to Production Database

This documentation may also contain appendices. When additional information is required to complete an upgrade task, you will be directed to the appropriate appendix.

Related Information

PeopleSoft provides additional information that may help with your upgrade. The following information (as well as updates to our upgrade) is available on PeopleSoft Customer Connection:

- *PeopleSoft Release Notes.* Before you begin your upgrade, read the PeopleTools and PeopleSoft application Release Notes to determine what has changed in the system and to familiarize yourself with the new features in this release. The Release Notes also indicate whether you need to upgrade other portions of your system, such as your RDBMS software or batch files.

- *Upgrades Database.* The Upgrade Documentation database on PeopleSoft Customer Connection contains information posted after shipment of this release that may not be included in these upgrade instructions. This information may include Updates & Fixes required at upgrade. Always check the Upgrade Documentation database for the most current documentation and information.

- *Getting Started on Your PeopleSoft Upgrade*. Before beginning a PeopleSoft upgrade, you must complete the tasks in the document *Getting Started on Your PeopleSoft Upgrade*. This document guides you through planning your upgrade as well as installing the software necessary to upgrade to the next PeopleSoft release. If you did not complete the tasks in this documentation, do so now.

Important! Before upgrading, it is imperative that you check the Upgrade Documentation database on PeopleSoft Customer Connection for updates to the upgrade instructions. We continually post updates as we refine the upgrade process.

See PeopleSoft Customer Connection (Implement Optimize + Upgrade, Upgrade Guide, Upgrade Documentation and Software).

CHAPTER 1

Prepare Your Database

This chapter discusses:

- Understanding Database Preparation
- Understanding Your Upgrade
- Copying Your Production Database
- Applying Upgrade Planning Files
- Editing Upgrade Planning DB2 Scripts
- Updating Statistics
- Running Initial Audit Reports
- Preparing Phone Number Upgrade Data
- Preparing the Financial Services Industries Data
- Upgrading Call Center Market Field
- Preparing Insurance Data
- Preparing Advanced Configurator Data
- Reporting Row Count for Tables
- Preparing Your Database
- Backing Up Demo Databases
- Comparing Customizations
- Identifying Customizations
- Preparing for the Application Upgrade
- Backing Up After Prepare Your Database

Understanding Database Preparation

You must make a copy of your production database before you start preparations for the technical portion of the upgrade. Unless otherwise noted, run these tasks on your Copy of Production database (not the New Release Demo database). These tasks do not use the new PeopleSoft release. You should use your current codeline and current Oracle's PeopleSoft PeopleTools release to perform these tasks unless instructed otherwise.

Important! You must read the documentation *Getting Started on Your PeopleSoft Upgrade* before you continue with your upgrade. This getting started guide explains the upgrade process, terminology, and setup tasks that *must* be performed prior to starting your upgrade.

Task 1-1: Understanding Your Upgrade

This section discusses:

- Understanding PeopleSoft Upgrades
- Verifying the Software Installation
- Defining Upgrade Databases
- Reviewing Upgrade Notes and Tips

Understanding PeopleSoft Upgrades

This task reviews information you need to know before you begin your upgrade. It explains the different types of databases that you will use and provides useful upgrade tips and information that you may need to apply before beginning your upgrade.

Task 1-1-1: Verifying the Software Installation

Before continuing with the upgrade, you must complete all of the tasks in *Getting Started on Your PeopleSoft Upgrade,* "Install the Software Release." Verify that the following tasks are complete:

- Installing the new release.
- Applying PeopleTools patches.
- Applying updates required for upgrade.
- Installing the Change Assistant.
- Creating and configuring an upgrade job.
- Setting Configuration Manager profile.
- Reviewing upgrade step properties.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 1-1-2: Defining Upgrade Databases

The following databases will be used during your upgrade:

- The New Release Demo database always refers to the database delivered with your new PeopleSoft release.

It contains the new and changed database objects that you want to add. The New Release Demo database is also referred to as the Demo database later in the upgrade.

• The Copy of Production database refers to the copy of your production database, into which you will add the new and changed objects for this release from the New Release Demo database.

Note. You will create more than one Copy of Production database. Your second and subsequent copies are referred to as the New Copy of Production.

• The Copy of Current Demo refers to the copy of the demo database for the release that you are currently using.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 1-1-3: Reviewing Upgrade Notes and Tips

This section contains information that may apply to your upgrade product. Review the information in this section before beginning your upgrade.

• Performance Recommendations

Before beginning your upgrade, you should plan for performance issues.

See Appendix: "Improving Performance."

• Microsoft SQL Server Column Statistics

As of Microsoft SQL Server 2000, user-defined statistics can be created on columns within a table. This feature is not supported by PeopleTools. If you added user-defined statistics to any columns in your PeopleSoft application, it may cause errors to occur during the upgrade steps that alter tables. PeopleSoft recommends that you drop all user-defined statistics on columns of PeopleSoft tables before proceeding with your upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-2: Copying Your Production Database

This section discusses:

• Making a Copy of Production Database

• Increasing Database Space

Task 1-2-1: Making a Copy of Production Database

Make a copy of your production database. You will upgrade this database, rather than performing the upgrade directly on your production database. Performing an upgrade on a copy of your production database enables you to test your upgrade in a controlled environment. Refer to the administration guide for your database platform for information on copying databases.

Note. Move to Production: This is a second Copy of Production sometimes referred to as the New Copy of Production. The first Copy of Production, or "old" Copy of Production, will now be the source database (it was the target database in the initial test pass). The second, or "new" Copy of Production, is now the target database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-2-2: Increasing Database Space

To prepare for the upgrade, you may need to increase the space allocated to your Copy of Production database. Depending on your relational database management system (RDBMS), this may include allocating space to tablespaces or allocating database primary space and log files. Be aware that your new environment needs to accommodate both the existing data in your Copy of Production database as well as the new data, new data structures, and new database objects. Every site and configuration is different, so Oracle cannot offer a guaranteed estimate of your database sizing needs.

As part of the initial upgrade pass, you may need to revisit your initial space allocation settings more than once as you progress through the upgrade. At the end of the initial pass, the final space allocation settings will closely reflect the space you will need to complete any subsequent Move to Production passes. Work with your DBA to ensure that your environment is set up appropriately for both the initial and Move to Production passes.

See the PeopleSoft installation documentation for your product line and release.

Note. Oracle RDBMS customers also need to alter the tablespace for PSIMAGE and increase it to 200 MB; autoextend on next 10 MB; maxsize unlimited.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-3: Applying Upgrade Planning Files

This section discusses:

- Understanding Applying Upgrade Planning Files
- Applying the UPGOPT Project

• Building the UPGOPT Project

• Setting Up Upgrade Planning Security

Understanding Applying Upgrade Planning Files

In this task, you apply the upgrade planning files that you downloaded from the Upgrade database on Customer Connection to your current codeline. These files may include Structured Query Report (SQR) programs and scripts that you will execute in later tasks, and a project that you will apply to your Copy of Production database. This project may include records, fields, pages, menus, queries, and process definitions that allow functional users to define conversion information needed for later upgrade tasks.

Task 1-3-1: Applying the UPGOPT Project

In this step, apply the UPGOPT project to your Copy of Production database using the Copy Project from File process.

To apply the UPGOPT project:

1. Using your current codeline, launch Application Designer and sign in to your Copy of Production database.

2. Select Tools, Copy Project, From File.

3. From the dialog box, select the import directory PS_HOME\PROJECTS\ (current codeline).

4. Click UPGOPT in the Projects box, and then click Select.

5. Click Copy.

    This copies the UPGOPT project onto your Copy of Production database.

6. Using your current codeline, launch Data Mover and sign on to your Copy of Production database.

7. Run the following script to load Access Groups and the Upgrade Query Tree:

    ```
    \PS_HOME\SCRIPTS\UPGOPT_CR88.DMS
    ```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-3-2: Building the UPGOPT Project

In this step you create and alter tables, and create views.

To build the UPGOPT project:

1. Using your current codeline, launch Application Designer and sign in to your Copy of Production database.

2. Select File, Open...

3. In the Definition drop-down list box, select *Project* and click Open to display the list of projects.

4. Select *UPGOPT* and click Open again.

5. Select Build, Project...

6. Under Build Options, select Create Tables, Create Views.

7. Click Settings...

8. On the Create tab, select Recreate View if it already exists and Recreate Table if it already exists.

9. On the Logging tab, select Fatal errors, warnings, and informational messages.

10. On the Scripts tab, select Output to separate files.

11. In the Script File Names box, give your scripts a unique name that reflects this task number and the object being created.

12. Click OK.

13. Under Build Execute Options, select Build script file.

14. Click Build.

15. Using the appropriate SQL query tool for your platform, run the scripts created in the step above.

    Run the scripts in the following order: Create Tables, Create Views, Create Indexes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-3-3: Setting Up Upgrade Planning Security

In this step, you will set up security on your Copy of Production database.

To set up security:

1. Select PeopleTools, Security, Permissions and Roles, Permission Lists.

2. Enter the permission list for the users who will be reviewing and setting up functional requirements for the upgrade, and then click Search.

3. Select the permission list for the users that will be reviewing and setting up functional requirements for the upgrade.

4. Select or insert the menu name UPG_SETUP_CRM, and click Edit Components.

5. Select all items in the menu.

6. Click OK.

7. Click Save.

8. Select PeopleTools, Security, Permissions & Roles, Permission Lists.

9. Select the permission list for the users that review and set up functional requirements for the upgrade.

10. Navigate to the Query tab.

11. Select Access Group Permissions.

12. Add one row with the Tree Name UPG_QUERY_TREE_CR and the Access Group UPG_ACCESS_GROUP.

13. Select OK, Save.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-4: Editing Upgrade Planning DB2 Scripts

Perform this step only if your database platform is DB2 z/OS. DB2 z/OS scripts that create tables need a `set current sqlid` statement so that the tables are created with the correct owner ID. Open each script listed below, then uncomment and modify all of the DB2-specific statements to reflect your environment.

For SQL scripts, if the script does not contain DB2-specific statements, add the following line to the top of the script and edit it for your environment, inserting the appropriate owner ID in uppercase characters:

```
set current sqlid = 'OWNER_ID';
```

For Data Mover scripts (DMS), if the script does not contain DB2-specific statements, add the following line to the top of the script and edit it for your environment, inserting the appropriate owner ID in uppercase characters:
```
set execute_sql set current sqlid = 'OWNER_ID';
```

The following is a list of scripts that you need to edit:
```
PUUPX07.DMS
```

Note. If you upgraded your system before, you may need to drop PSRECFIELD_TMP prior to running this script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 1-5: Updating Statistics

Run this task to improve performance of your compare and copy processes. Have your database administrator update statistics on your database before proceeding with your upgrade. Later in the upgrade, you will update your statistics again due to changes in the database structure.

See Appendix: "Improving Performance."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-6: Running Initial Audit Reports

This section discusses:

- Understanding Running Initial Audit Reports
- Run the Initial DDDAUDIT Report
- Run the Initial SYSAUDIT Report
- Create the INITALTAUD Project
- Run the Initial Alter Audit
- Review the Initial Audits

Understanding Running Initial Audit Reports

In this task, you run and review your initial DDDAUDIT, SYSAUDIT, and Alter Audit reports. Running these reports ensures that your database is as clean as possible for the remainder of the upgrade.

Task 1-6-1: Run the Initial DDDAUDIT Report

DDDAUDIT is an SQR script that compares your production SQL data tables with the PeopleSoft PeopleTools record definitions to identify inconsistencies.

In this step, DDDAUDIT is run using SQR from your current (old) PeopleSoft release against the Copy of Production to ensure that you are starting with a clean database.

You will review the output from the report in a later step.

See Review the Initial Audits.

See the Enterprise PeopleTools PeopleBook: System and Server Administration for your current release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-6-2: Run the Initial SYSAUDIT Report

SYSAUDIT is an SQR script used to identify "orphaned" PeopleSoft objects. For example, SYSAUDIT can identify a module of PeopleCode that exists but does not relate to any other objects in the system. SYSAUDIT also identifies other inconsistencies within your database.

In this step, SYSAUDIT is run using SQR from your current (old) release of PeopleSoft against the Copy of Production to ensure that you are starting with a clean database.

You will review the output from the report in a later step.

See Review the Initial Audits.

See the Enterprise PeopleTools PeopleBook: System and Server Administration for your current release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-6-3: Create the INITALTAUD Project

This section discusses:

• Understanding Creating the INITALTAUD Project

• Running the Step Create the INITALTAUD Project Automatically

• Creating the INITALTAUD Project

Understanding Creating the INITALTAUD Project

In this step, you create the INITALTAUD project and use it to run your initial Alter Audit. Creating this new project now ensures that all of the records with type *Table* in your system are audited. This project also includes any custom records that you created in your system.

If your old PeopleSoft PeopleTools release is 8.44 or later, you can run this step automatically in Change Assistant. To run this step automatically, proceed to "Running the Step Create the INITALTAUD Project Automatically." If your old PeopleSoft PeopleTools release is earlier than 8.44, proceed to "Creating the INITALTAUD Project."

Running the Step Create the INITALTAUD Project Automatically

To run the step Create the INITALTAUD Project automatically:

1. In Change Assistant, open your upgrade job.

2. In the task Running Initial Audit Reports, right-click the step Create the INITALTAUD Project, and then select Step Properties.

3. In the Step Properties dialog box, change the value in the Type field from *ManualStop* to *CreateProject*.

4. Click OK.

5. Select Edit, Run.

Creating the INITALTAUD Project

To create the INITALTAUD project:

1. Launch PeopleSoft PeopleTools and sign in to the Target database.

2. From Application Designer, select File, New…

3. Select Project, and then click OK.

4. Select Insert, Definitions into Project...

5. Select *Records* from the Object Type drop-down list box.

6. Select *Table* from the Type drop-down list box.

7. Click Insert, and then click Select All.

8. Click Insert, and then click Close.

9. Select File, Save All.

10. Enter the project name *INITALTAUD*.

    Warning! You must name the project *INITALTAUD* or the next step will fail.

11. Click OK.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-6-4: Run the Initial Alter Audit

To verify that the PeopleSoft PeopleTools definitions are synchronized with the underlying SQL data tables in your database, run the PeopleSoft PeopleTools alter record process on all records in your system. This process, called an Alter Audit, compares the data structures of your database tables with the PeopleSoft PeopleTools definitions to identify inconsistencies. The Alter Audit then creates SQL scripts with the data definition language (DDL) changes that are required to synchronize your database with the PeopleSoft PeopleTools definitions.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-6-5: Review the Initial Audits

In this step, you review the audits that you performed earlier in this task. Review the audits before proceeding with the upgrade.

Review the output from the SYSAUDIT and DDDAUDIT reports and correct any discrepancies. When application tables are deleted from the Application Designer, they are not automatically deleted from the system tables. Oracle takes this precaution in case you have customized information that you want to preserve. When you review your DDDAUDIT listing, these tables are listed as a discrepancy between the PeopleSoft application and the database.

Now you must decide whether to drop these tables or retain them. In most cases, you will want to drop the tables, using your SQL tool to drop the tables from the system catalogs. If you have customized information or processes that access these tables, you may want to retain them in the system tables even though they will no longer be accessed or updated by the PeopleSoft system. Drop any unnecessary deleted tables now so that your future DDDAUDIT reports will be as clean as possible.

The Alter Audit produces the scripts INITALTAUD_ALTTBL.SQL, INITALTAUD_CRTIDX.SQL, and INITALTAUD_CRTTRG.SQL. These scripts contain SQL that corrects any discrepancies between your PeopleSoft PeopleTools record definitions and the database system catalog table definitions. Review the Alter Audit output and correct any discrepancies.

Note. Triggers are always dropped and re-created during the alter process and will always show up in the generated Alter Audit script. You can ignore the generated script for triggers.

Note. For Microsoft SQL Server and DB2 UNIX/NT platforms, if your database has tables containing the MSSCONCATCOL or DBXCONCATCOL column, you will see SQL alter the tables and re-create their associated indexes, even though the underlying tables and indexes may not have changed.

Note. You will rerun the DDDAUDIT and SYSAUDIT SQR scripts later in the upgrade. If you want to preserve the log files generated by Change Assistant from this run, you will need to rename the files manually after completing this task.

See the Enterprise PeopleTools PeopleBook: System and Server Administration for your current release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-7: Preparing Phone Number Upgrade Data

This section discusses:

- Understanding Preparing Phone Number Upgrade Data

- Setting Up Number Management

- Setting Up Attributes

Understanding Preparing Phone Number Upgrade Data

Prior to the new PeopleSoft CRM release, there was no defined format for Service Phone Numbers. You could potentially choose any format. In the new release, the Country Code, National Destination Code (Area Code), the Least Significant Part (Subscriber number), the Trunk Prefix and the International Prefix are all defined separately, to allow efficient searching of Numbers and validation of Phone Numbers.

You may be using the Phone Number field with varying formats. Therefore, you must define the Phone Number Upgrade setup to capture the existing structure of the phone numbers before proceeding with the upgrade. This ensures that the existing phone numbers are correctly converted to the new structure.

In this task, PeopleSoft captures the current composition of the phone numbers that are maintained in the Number Management Pool. Generally, a Phone Number consists of the following elements:

- International Prefix
- Trunk Prefix
- Country Code
- National Destination Code (Area Code)
- Least Significant Part (Subscriber Number)

Some countries may have phone numbers of varying lengths. For example, the length of the phone number can be 10 digits, 11 digits, and so on. For each length of numbers, you must enter the Phone Number upgrade information.

Task 1-7-1: Setting Up Number Management

To prepare for Phone Number Conversion in Number Management:

1. Select Set Up CRM, Upgrade folder, and then click the Phone Number Upgrade link.

2. Click the Add a New Value tab.

3. Enter a unique Conversion ID.

   For example, F15 to indicate a phone number length of 15.

Phone Number Upgrade page displaying Object Name as Number Management

4. In the Object Name field, select Number Management.

5. Enter a Description.

6. Enter the Number Length of the phone number.

7. Select each Phone Number Element that you want from the drop-down list.

   For example: Country Code, National Destination Code, least Significant Part, and so on.

   Note. You can add or remove elements by selecting the Add (+) or Remove (–) buttons on the Phone Number Upgrade page.

   ---

8. For each of these Phone Number Elements, enter the values as follows:

   a. Enter the Starting Position of the element in the phone number.

   b. Enter the Length of the element from the starting position in the phone number.

   c. Click Save to save each of your changes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Order Capture	All	All

Task 1-7-2: Setting Up Attributes

To prepare for Phone Number Conversion in Attributes:

1. Select Set Up CRM, Upgrade folder, and then click the Phone Number Upgrade link.

2. Click the Add a New Value tab.

3. Enter a unique Conversion ID.

   For example, A11 to indicate a phone number length of 11.

Phone Number Upgrade page displaying Object Name as Attributes

4. In the Object Name field, select Attributes.

5. Enter a Description.

6. Enter the Number Length of the phone number.

7. Select each Phone Number Element that you want from the drop-down list.

   For example: Country Code, National Destination Code, least Significant Part, and so on.

   Note. You can add or remove elements by selecting the Add (+) or Remove (–) buttons on the Phone Number Upgrade page.

   For each of these Phone Number Elements, enter the values as follows:

   a. Enter the Starting Position of the element in the phone number.

   b. Enter the Length of the element from the starting position in the phone number.

   c. Click Save to save each of your changes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Order Capture	All	All

Task 1-8: Preparing the Financial Services Industries Data

In this task you prepare your CRM Financial Services Industries (FSI) data for upgrade to the new release.

Note. Complete this step only if you are upgrading your FSI product. If you are not upgrading your FSI product, you can skip this task.

Certain fields in FSI have been marked as required in the new release. A query is provided to identify if you have any records where fields were not populated. The required record field combinations are listed as follows:

- RBF_TCHK_DENOM.DENOMINATION
- RBF_TCHK_DENOM.PACK_OF
- RBF_PAYBILL_CON.ACCOUNT_NUMBER
- RBF_BILL_CATEG.BILL_CATEGORY

To run the required field query:

1. Select Reporting Tools, Query, Query Manager.

2. Run the following query:

   UPG_RBF_BILL_CATEG_REQ

   This query returns all rows of the table PS_RBF_BILL_CATEG where a required field is missing a value.

3. Modify your data to specify the proper value for each row.

4. Continue to run the query until no rows are returned.

5. Repeat steps 1- 4 for each of the following queries to enter missing and required field values in tables PS_RBF_PAYBILL_CON and PS_RBF_TCHK_DENOM.

   Be sure to run all of the queries until no rows are returned before continuing.

   - UPG_RBF_PAYBILL_CON_REQ
   - UPG_RBF_TCHK_DENOM_REQ

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Banking Transactions Bill Presentment	All	All

Task 1-9: Upgrading Call Center Market Field

In this task, you upgrade the Call Center Market field. The Upgrade Market tab on the Upgrade Call Center Market page lists business units and whether they are tied to either the financial services industry or the telecommunications industry for any of the following tables:

- BUS_UNIT_RC_DEF—Call Center Business Unit Defaults
- OPR_DEF_TBL_RC—Call Center User Preferences
- RC_CASE—Case Main Record

Previously, the market value Financial Services was used for both the financial services and insurance industries. The market value Communications was used for both the telecommunications and energy industries. In CRM 8.9, separate templates are defined for each of these industries. There are now four possible values for the Market field:

- Financial Services
- Insurance
- Telecommunications
- Energy

If you are in the insurance industry and have been using the market value Financial Services, you should change the value to *Insurance*. Similarly, if you are in the energy industry and have been using the market value Communications, you should change the value to *Energy*.

To change the Call Center Market value:

1. Select Set Up CRM, Upgrade.
2. Select the Upgrade Call Center Market page, and then select the Upgrade Market tab.

Upgrade Call Center Market page: Upgrade Market tab

1. Change the values in the Market field for any relevant business units as necessary.

2. Click Save to save the Upgrade Market component.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Support	All	All

Task 1-10: Preparing Insurance Data

In this task, you prepare your PeopleSoft CRM Insurance data for the migration to the new release.

Note. Complete this task only if you are upgrading the PeopleSoft Customer Relationship Management (CRM) Insurance product.

CRM requires certain new fields in the new PeopleSoft release. PeopleSoft provides a query so that you can identify any records whose fields are not populated. Required record field combinations are:

- RBI_ASSET_TYPE.ASSET_TYPE
- RBI_ASSET_TYPE.ASSET_DESCRIPTION
- RBI_XLAT_TBL.FIELD_VALUE
- RBI_XLAT_TBL.XLATSHORTNAME
- RBI_XLAT_TBL.RBI_XLATLONGNAME

To run the required field query:

1. Select Reporting Tools, Query, Query Manager.

2. Run the following query:

   ```
   UPG_RBI_ASSET_TYPE_REQ
   ```

3. This query returns all rows of the table RBI_ASSET_TYPE where a required field is missing a value.

4. Modify your data to specify the appropriate value for each row. You will find the rows that are missing values on the Results tab.

5. Continue to run the query until no rows are returned.

6. Repeat steps 1-5 for the following query to enter missing and required values for the table PS_RBI_XLAT_TBL. Be sure to run the query until no rows are returned, which means all required values are available.

   ```
   UPG_RBI_XLAT_TBL_REQ
   ```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Bill Presentment Policy & Claims Presentment	All	All

Task 1-11: Preparing Advanced Configurator Data

This task applies only if you are using PeopleSoft Advanced Configurator with your current Customer Relationship Management (CRM) installation.

As part of the conversion to the new version of the Advanced Configurator, you must perform a manual step to update the tables in question to prevent the Alter Without Deletes step from failing.

The code to execute, shown here, is written for the SQL Server platform. It will be necessary, if you are using a different database, to have the code reviewed and modified by your database administrator.

ALTER TABLE PS_CFG_CONFIG_HS NOCHECK CONSTRAINT ALL

ALTER TABLE PS_CFG_COMPNT_HS NOCHECK CONSTRAINT ALL

ALTER TABLE PS_CFG_COMPOUND_HS NOCHECK CONSTRAINT ALL

UPDATE PS_CFG_CONFIG_HS SET CFG_APPROVAL_ID = 0 WHERE CFG_APPROVAL_ID IS NULL

UPDATE PS_CFG_COMPNT_HS SET CFG_APPROVAL_ID = 0 WHERE CFG_APPROVAL_ID IS NULL

UPDATE PS_CFG_COMPOUND_HS SET CFG_APPROVAL_ID = 0 WHERE CFG_APPROVAL_ID IS NULL

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	CFG	All	All

Task 1-12: Reporting Row Count for Tables

You may find it helpful to run a report that identifies any table without rows, that is, any table not used in your production database. This information can help you determine whether to accept a change from the New Release Demo database. The UPGCOUNT process reports the row counts of all PeopleSoft tables in your database. You can find the resulting report (UPGCOUNT.LIS) in the TEMP directory specific to your machine.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 1-13: Preparing Your Database

This section discusses:

- Understanding Database Preparation
- Verify Database Integrity
- Clean the PSOBJCHNG Table
- Drop PeopleTools Tables

- Shrink Images

- Purge Message Queues

Understanding Database Preparation

In this task, you perform a variety of steps in preparation for the PeopleSoft PeopleTools upgrade. These steps prevent errors in tasks later in the upgrade.

Task 1-13-1: Verify Database Integrity

The DBCC CHECKDB command is run to perform a database consistency check on your Copy of Production database. A database consistency check ensures that your database platform environment is clean and minimizes any potential upgrade errors due to possible database corruption.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server Sybase	All

Task 1-13-2: Clean the PSOBJCHNG Table

This step deletes all data stored in the PSOBJCHNG table, which contains all renamed records and fields. The data stored in the PSOBJCHNG table must be deleted before starting your upgrade. The build process looks in this table when running alter renames. Change Assistant will execute the following SQL:

```
DELETE FROM PSOBJCHNG
```

Note. Move to Production: If you rename records or fields later in your upgrade, you should expect to see rows in the PSOBJCHNG table at the end of the upgrade pass. During the Move to Production these rows will be copied from your old Copy of Production to your new Copy of Production. Thus, this step is not necessary during Move to Production.

See "Apply Application Changes," Modifying the Database Structure.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 1-13-3: Drop PeopleTools Tables

In this step, you drop PeopleSoft PeopleTools tables to ensure the successful completion of your upgrade. You will drop the following tables, if they exist in your database, using the SQL tool of your choice.

Drop the following tables:

- PS_PSMCFQUEUESLANG

Note. The table, PS_PSMCFQUEUESLANG, contains no data and can be safely dropped. Do *not* drop the table PSMCFQUEUESLANG.

- PSOPTSTATUS

  The table, PSOPTSTATUS, will be converted into a view and can be safely dropped. Do not drop the view PSOPTSTATUS.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-13-4: Shrink Images

If you have customized images stored in your database, you may need to shrink these images before updating PeopleSoft PeopleTools system tables later in the upgrade. Large image fields could cause that step to fail because it is not possible to bind long raw data that is longer than 32 KB.

To shrink images using a PeopleSoft PeopleTools release later than 8.44.14:

1. Launch Configuration Manager and select the Profile tab.

2. Select the profile for the upgrade database and click Edit.

3. Select the Common tab.

4. Select the option that is labeled either Convert and Shrink Images to Image Size Limit, or Convert DIB and BMP images to JPG.

5. Click OK.

   Note. If you re-shrink images, select Don't Convert, but Shrink Images to Image Size Limit. Specify the number of bytes for the image size limit.

   ---

6. Launch Application Designer.

7. Select Tools, Upgrade, Convert Images...

8. Select Convert Static Images in Image Catalog.

9. Click Start to convert or shrink images.

10. Select Tools, Upgrade, Convert Images...

11. Select Convert Dynamic Images for fields. Select the box for all of the fields listed.

12. Click Start to convert or shrink images.

If you are using a PeopleSoft PeopleTools release earlier than 8.44.15, you will need to manually save and temporarily remove any custom images greater than 32 KB. Using your SQL query tool, run the following SQL to identify images greater than 32 KB:

```
-- CREATE A TABLE TO HOLD THE CONVERTED IMAGE
CREATE TABLE PS_CONVIMG (CONTNAME VARCHAR2(30), IMAGESIZE BLOB);
-- LOAD CONVERTED DATA INTO THE TABLE
```

```
INSERT INTO PS_CONVIMG SELECT CONTNAME,TO_LOB(CONTDATA) FROM PSCONTDEFN;
-- RETRIEVE IMAGES OVER 32K
SELECT CONTNAME, DBMS_LOB.GETLENGTH(IMAGESIZE) IMAGESIZE FROM PS_CONVIMG WHERE⇒
 DBMS_LOB.GETLENGTH(IMAGESIZE) > 32768;
```

To manually save images greater than 32 KB:

1. In Application Designer, insert your images into a project.

   Select Insert, Definitions into Project.

2. Save the project.

3. Copy the images to file.

   Select Tools, Upgrade, Copy Project to File.

4. Delete the rows for the images in your project from the PSCONTDEFN table.

5. When you are finished with the upgrade, copy the project from file to restore your custom images.

   Select Tools, Upgrade, Copy Project from File.

See "Apply PeopleTools Changes," Updating PeopleTools System Tables.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 1-13-5: Purge Message Queues

Ensure that all of your message transactions are complete before starting the upgrade. Message functionality and structure changed in the new release, which will prevent old messages from processing successfully.

This step runs the following Data Mover script (DMS), found in the *PS_HOME*\SCRIPTS directory of your old release codeline, on your Copy of Production database to purge your message queues:

```
APPMSGPURGEALL.DMS
```

Warning! A script of the same name is found in the codeline of the release to which you are upgrading. Do not use this script; it will not run successfully.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-14: Backing Up Demo Databases

This section discusses:

- Backing Up Copy of Current Demo

- Backing Up New Release Demo

Task 1-14-1: Backing Up Copy of Current Demo

Back up your Copy of Current Demo database now. This upgrade requires you to run scripts on this database.
Before the upgrade starts, you need to take a backup of this environment to preserve your Oracle-delivered
demo implementation.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Copy of Current Demo	Initial	All	All	All

Task 1-14-2: Backing Up New Release Demo

Back up your New Release Demo database now. This upgrade requires you to run scripts on this database.
Before the upgrade starts, you need to take a backup of this environment to preserve your Oracle-delivered
demo implementation.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 1-15: Comparing Customizations

This section discusses:

- Running Compare UPGCUST

- Running UPGCUST Filter Script

- Reviewing UPGCUST Compare Log

Note. In this task, you identify customizations on the Copy of Production by running a database compare
against the Copy of Current Demo database.

Task 1-15-1: Running Compare UPGCUST

This step creates a project on your Copy of Production database called UPGCUST and executes a database compare of all comparable object types. This compare is run to identify all customizations on the Copy of Production database. The database compare occurs between your Copy of Production and the Copy of Current Demo database. The following comparable object types are omitted from the comparison:

- Application packages.
- Application package PeopleCode.
- File reference type codes.
- IB queues.
- Java portlet user preferences.
- Messages.
- Message catalog entries.
- Message PeopleCode.
- Portal registry user favorites.
- Portal registry user home pages.
- Services
- Service operations.
- Service operations handlers.
- Service operation versions.
- Service operation routings.

Message catalog entries are exported and imported with Data Mover in a later step. Portal registry user home pages, portal registry user favorites, file reference type codes, and Java portlet user preferences remain in the Copy of Production environment and are not copied from the New Release Demo database. Integration Broker objects will be compared later in the upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Copy of Current Demo	Initial	All	All	All

Task 1-15-2: Running UPGCUST Filter Script

This step removes all objects from the UPGCUST project that are not marked *Changed* or *Unchanged* in your Copy of Production environment. It is used to isolate only custom objects in the UPGCUST project.

The script name for your upgrade is:

```
PUUPX99.DMS
```

See Appendix: "Using the Comparison Process."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 1-15-3: Reviewing UPGCUST Compare Log

In this step, review the log file and compare reports generated by the database compare in the previous step to ensure that it completed successfully. A detailed analysis of these compare reports is not necessary. Later in the upgrade, you will review a new set of compare reports when customizations are compared to the New Release Demo database.

Note. Preserving Custom Profile Data Records and Fields: If you have created custom profiles, you would have also manually created their corresponding records and fields. Typically, the naming convention for records is *<profile_record_prefix><profile_name>* where the *profile_record_prefix* is specified under profile setup.

When you ran a compare between your production database and your old release demo, these objects were added to the UPGCUST project as customizations. When this project is compared to the new release, you will have the option to keep or delete these objects.

In order for your existing custom profiles to work in the upgraded database, you must preserve these objects by choosing to keep them during the comparison phase.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 1-16: Identifying Customizations

In this task, identify your modifications to Mass Change, EDI, Message Catalog, SQR Strings, XML Service Information, Verity Based Indexes, Setup Manager data, Pagelet Wizard objects, and related language system data, so that you can reload them later in the upgrade process.

The upgrade tasks will replace all Mass Change processes, Verity Based Indexes, and Setup Manager data. Only modifications to delivered Pagelet Wizard objects will be overwritten because any non-delivered custom Pagelet Wizard objects will be preserved during the upgrade. You cannot print Mass Change code. Be sure that you have extracted your modifications to reapply them later. You must extract your modifications, using cut and paste, to a file for manual reapplication later. EDI tables must be handled in the same way. Reload additional data and review customizations in Oracle-delivered data.

Message sets 0-19,999 will be overlaid during the upgrade, so any customizations you have made in this range will be lost. In addition, all SQR strings will be replaced. To save your customizations, cut and paste your changes to a file and manually reapply them.

Be aware that the data loaded by the PeopleSoft software must not be overwritten.

If you have multiple languages loaded, you should save any custom data you have in related language tables for system data. For these tables, data will be exported from the New Release Demo database when you export related language system data, and imported to your Copy of Production when you import related language system data. The import may delete your custom data, depending on the import option.

The tables that need to be reviewed are listed in the following scripts. These scripts can be found in your new release *PS_HOME*\SCRIPTS directory.

Important! The scripts below are delivered with and run from your new PeopleSoft release. These scripts are *not* run in this task. You will run these scripts later in the upgrade process.

Review the tables that will be overwritten in these scripts:

Tables	Script
Message Catalog	DLUPX01E.DMS
SQR Strings	DLUPX04E.DMS
EDI	DLUPX05E.DMS
Mass Change	DLUPX06E.DMS
XML Service Information	DLUPX13E.DMS
Setup Manager, Verity Based Indexes, and Optimization Models	DLUPX16E.DMS
Pagelet Wizard	DLUPX14E.DMS

If your database contains translations, review the list of related language system data tables that will be exported and imported in these scripts:

```
DLCRLASYSE.DMS
DLCRLASYSI.DMS
```

Note. Move to Production: Once you have reapplied these customizations at the end of your initial upgrade pass, you will not need to apply them again. The affected tables are moved from the old Copy of Production to the New Copy of Production by the scripts listed in the following table:

Tables	Scripts
Mass Change	MVAPPEXP.DMS MVAPPIMP.DMS
EDI	MVPRDEXP.DMS MVPRDIMP.DMS
Strings	MVAPPEXP.DMS MVAPPIMP.DMS
Messages	MVAPPEXP.DMS MVAPPIMP.DMS

Tables	Scripts
XML Service Information	MVPRDEXP.DMS MVPRDIMP.DMS
Setup Manager, Verity Based Indexes, and Optimization Models	MVAPPEXP.DMS MVAPPIMP.DMS
Pagelet Wizard	MVUPX16E.DMS

See Also

"Apply Application Changes," Loading Data for Data Conversion.

"Apply Application Changes," Loading Data to Complete System Setup.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 1-17: Preparing for the Application Upgrade

This section discusses:

- Creating a Copy of RecField Definitions
- Editing the System Data Swap Script
- Editing the PeopleTools Swap Script

Task 1-17-1: Creating a Copy of RecField Definitions

This step creates a copy of the contents of PSRECFIELD, before the upgrade is begun. It is used by the data conversion code to determine the structure of tables that may have been impacted by fixes you applied. The script name is:

```
PUUPX07.DMS
```

Note. If you have upgraded your system before, you may need to drop the PSRECFIELD_TMP table prior to running the PUUPX07.DMS script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 1-17-2: Editing the System Data Swap Script

This step should only be completed if your Copy of Production has a base language other than English. In a later step you will swap PeopleTools Managed Object tables that have related language on your New Release Demo database, so that it is translated correctly when you copy to your Copy of Production. In this step, you edit the swap script to set your New Release Demo database language to the same language as your Copy of Production.

To do this, follow the edit instructions in the script.

The swap system data script for your path is:

```
DLCRLASWAP.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	Non-English Base Language

Task 1-17-3: Editing the PeopleTools Swap Script

This step should only be completed if your Copy of Production has a base language other than English. In a later step you will swap all PeopleTools Managed Object tables that have related languages on your New Release Demo Database so that it is translated correctly when you copy to your Copy of Production. In this step you edit the swap script to set your New Release Demo database language to the same language as your Copy of Production.

To do this, follow the edit instructions in the script.

The swap script for your upgrade path is:

```
PT_RELEASE_SWAP.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	Non-English Base Language

Task 1-18: Backing Up After Prepare Your Database

Back up your Copy of Production database now. This enables you to restart your upgrade from this point, should you experience any database integrity problems during the remaining tasks in the upgrade process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

CHAPTER 2

Apply PeopleTools Changes

This chapter discusses:

- Understanding PeopleTools Changes
- Verifying Upgrade User
- Performing Script Modifications
- Updating PeopleTools System Tables
- Turning Off Change Control
- Loading Model Definition Data
- Loading Message Data
- Reviewing PeopleTools Objects
- Exporting and Copying Projects
- Populating Tablespace Data
- Building Updated PeopleTools Project
- Migrating Records to New Tablespaces
- Loading Base Data
- Loading Language Data
- Loading PeopleTools Data
- Loading PeopleTools Definition Group
- Converting PeopleTools Objects
- Creating PeopleTools Views
- Converting Integration Broker
- Setting Object Version Numbers
- Converting Database Data Types
- Backing Up After PeopleTools Upgrade

Understanding PeopleTools Changes

To implement a successful upgrade, you must apply the necessary PeopleSoft PeopleTools changes. This involves updating the following PeopleSoft PeopleTools features: system tables, copying and building projects, loading seed data, and converting objects. From this point forward, you run all steps using your newly installed version of the software.

Note. Unless otherwise indicated, all scripts can be found in your new release PeopleSoft codeline PS_HOME\SCRIPTS directory. The actual script name is indicated in the description of each step in uppercase letters.

Task 2-1: Verifying Upgrade User

In this task, you verify that the user performing the upgrade steps has proper permissions to complete the upgrade.

Ensure that your upgrade user has PeopleSoft administrator privileges. This allows access to the PeopleSoft portal to make necessary security changes for the upgrade and to run the Portal Application Engine upgrade program. You use this ID to update the security setting for your other users so they can sign on after the upgrade.

Warning! You must perform this step now using your old version of PeopleSoft PeopleTools. If you skip this step, or if your user has insufficient PeopleSoft administrator privileges, you will not be able to complete your upgrade. You cannot complete this step later in the upgrade process. Perform the following steps to grant administrator privileges now.

To grant your upgrade user PeopleSoft administrator privileges:

1. From the browser, select PeopleTools, Security, User Profiles, User Profiles.

2. Select the user ID for your upgrade user.

3. Select the Roles tab.

4. Add the role *PeopleSoft Administrator* if it is not already granted to your upgrade user.

5. Save the user profile.

See the Enterprise PeopleTools PeopleBook: Security Administration for your new release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-2: Performing Script Modifications

This section discusses:

• Understanding Script Modifications

- Update Configuration Manager Profile
- Run a DBTSFIX Report
- Edit the DBTSFIX Output Scripts
- Edit the GRANT Script
- Edit the PSLANGUAGES Script
- Edit the TLSUPGNONCOMP Script
- Edit the PTxxxTLS Scripts
- Edit the DB2 Scripts
- Edit Move to Production Import Scripts
- Edit Move to Production Password
- Edit the DDLDB2 Script
- Edit the DDLDBX Script
- Edit the DDLORA Script
- Edit the DDLIFX Script
- Edit the MSGTLSUPG Script
- Edit the Integration Broker Script
- Edit Multilingual Step Properties
- Edit Data Type Steps

Understanding Script Modifications

In this task, you perform preparation steps and make manual modifications to scripts delivered with your new PeopleSoft release. You must make the following modifications before proceeding with the remainder of your upgrade.

Note. Move to Production: These steps will be repeated in the Move to Production (MTP) pass. The script that you previously edited may be acceptable, or you may need to change it again if your New Copy of Production has a different security or data definition language (DDL) configuration.

Task 2-2-1: Update Configuration Manager Profile

The Configuration Manager default profile needs to be updated to use values for your new release PS_HOME. Change Assistant uses this information to run automated steps for the rest of the upgrade. These are settings on the workstation and you need to do this for each workstation that you may use during the upgrade.

To update the profile:

1. Open Configuration Manager.
2. On the Profile tab, select the Default profile, click Edit, and select the Common tab.
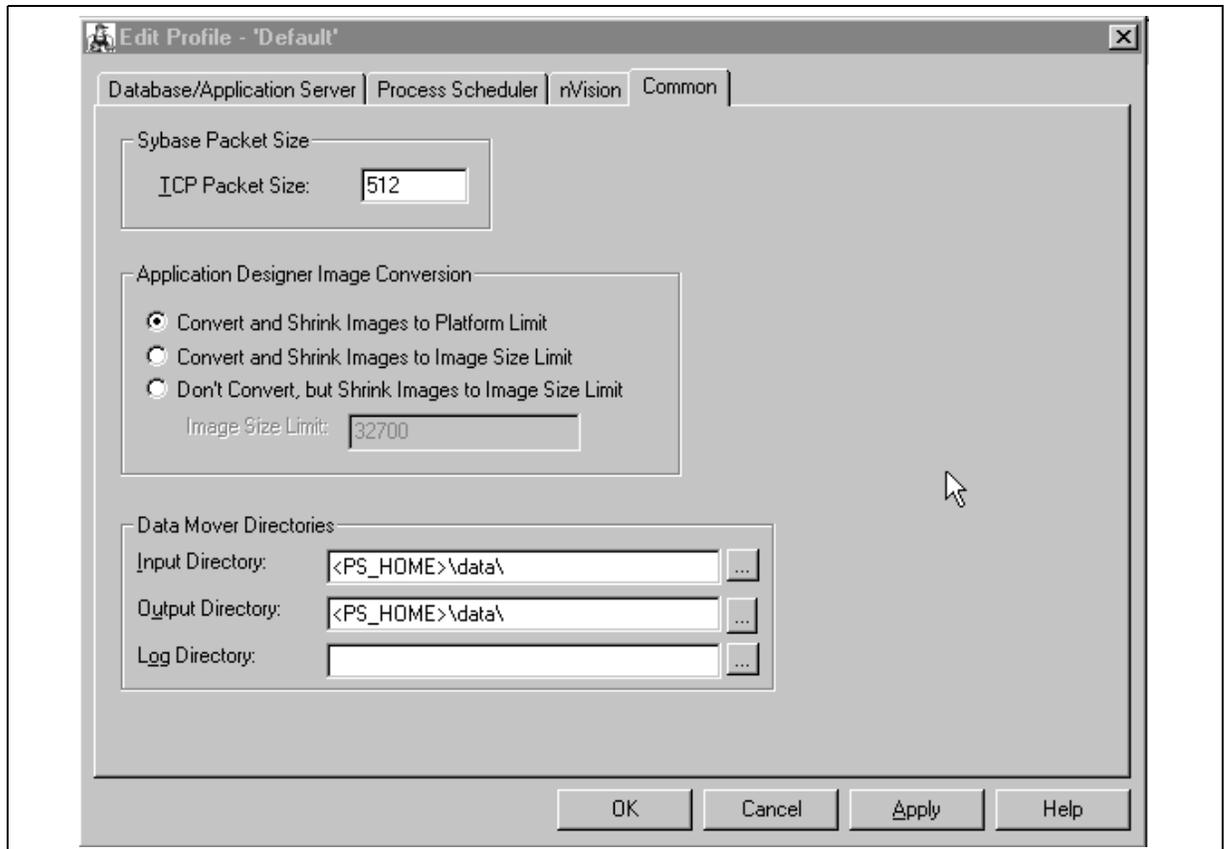
Edit Profile - Default dialog box: Common tab

Note. The Input Directory must be *<PS_HOME>*\data\, substituting *<PS_HOME>* with your directory. The Output Directory must be the same.

3. The Log Directory is set by Change Assistant and should be left as is.

4. Select the Process Scheduler tab and verify your SQR settings. Change Assistant will use these settings to launch SQR.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-2-2: Run a DBTSFIX Report

The DBTSFIX.SQR script aligns the tablespaces in the delivered release scripts with the Target database used during the upgrade. This process generates new release scripts, conforming to the REL*xxx*DBTSFIX.SQL naming convention that you run in a later task. Run this script to preserve your existing table-to-tablespace mapping in the Target database. The result of this task will be a REL*xxx*DBTSFIX.SQL script in which *xxx* represents a release number (for example, 800, 810, 811, 812, and so on) associated with your particular path.

Note. Before running this step, verify that the PS_HOME values are set correctly in the Change Assistant environment for your upgrade job. Change Assistant uses the PS_HOME information to determine which scripts need to be generated.

Important! Do not run the new release script at this point. You will be instructed to run this script later in the upgrade process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle Informix DB2 UNIX/NT DB2 z/OS	All

Task 2-2-3: Edit the DBTSFIX Output Scripts

Edit the generated REL*xxx*DBTSFIX scripts according to the comments within each script. Verify that the data definition language (DDL) is accurate for your environment for tablespaces, database names, owner IDs, and so forth. The scripts can be found in your Change Assistant output directory for this upgrade path.

Warning! Do not run output scripts at this time. At this point in the upgrade process, you must only review the DBTSFIX output scripts.

Note. For DB2 z/OS customers only: When upgrading from one PeopleSoft release to the next, it is possible to move tables from a tablespace using a 4-KB buffer pool to one using a 32-KB buffer pool. The tablespaces PSIMAGE and PSIMGR use 32-KB buffer pools in Oracle-delivered applications. To maintain the tablespace schema used at your site, the DBTSFIX.SQR script will revise the upgrade scripts with the database and tablespace information from your database (the Target database). Tables assigned to tablespaces PSIMAGE or PSIMGR in the upgrade scripts are the exception to this approach. Note that Oracle has reassigned some tables to PSIMAGE or PSIMGR because they now require a 32-KB buffer pool. You must manually edit the "Create Table" statements in the upgrade scripts to replace the tablespace name PSIMAGE or PSIMGR with an appropriate tablespace name in your implementation that utilizes a 32-KB buffer pool. The database name must also be replaced with the value corresponding to the tablespace you are using.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle Informix DB2 UNIX/NT DB2 z/OS	All

Task 2-2-4: Edit the GRANT Script

Edit PS_HOME\SCRIPTS\GRANT.SQL and make the necessary modifications as documented in the script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-2-5: Edit the PSLANGUAGES Script

Edit PS_HOME\SCRIPTS\PSLANGUAGES.DMS and make the necessary modifications as documented in the script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 2-2-6: Edit the TLSUPGNONCOMP Script

Edit PS_HOME\SCRIPTS\TLSUPGNONCOMP.DMS and make the necessary modifications as documented in the script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 2-2-7: Edit the PTxxxTLS Scripts

This step applies only if you are running on a DB2 z/OS platform.

To edit the PT*xxx*TLS scripts:

1. Edit all of the scripts in the PS_HOME\SCRIPTS directory on the file server that conform to this file naming convention:

   ```
   PTxxxTLS.DMS
   PTxxxTLSyyy.DMS
   ```

   The *xxx* represents a PeopleSoft PeopleTools release greater than your current PeopleSoft PeopleTools release and *yyy* represents the three-letter language code.

2. Uncomment and modify the set owner ID command within each script, as in the following example:

   ```
   set execute_sql set current sqlid = 'OwnerId In Upper Case';
   ```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 2-2-8: Edit the DB2 Scripts

Perform this step only if your database platform is DB2 z/OS. DB2 z/OS scripts that create tables need the `set current sqlid` statement so that the tables are created with the correct owner ID. Open each script listed below, then uncomment and modify all of the DB2-specific statements to reflect your environment.

For SQL scripts, if the script does not contain DB2-specific statements, add the following line to the top of the script and edit it for your environment:

```
set current sqlid = 'OWNERID (in uppercase)';
```

For Data Mover scripts (DMSs), if the script does not contain DB2-specific statements, add the following line to the top of the script and edit it for your environment:

```
set execute_sql set current sqlid = 'OWNERID (in uppercase)';
```

Following is a list of the scripts that you need to edit:

```
DB2TMPIDXCREATE.SQL
DLUPX02I.DMS
DLUPX13I.DMS
DLUPX14I.DMS
PT_RELEASE_IMPORT.DMS
DLCRLASYSI.DMS
DLCRSYSI.DMS
DLCRX24I.DMS
RNCRD11DB2.SQL
DLCRD12I.DMS
DLUPX16I.DMS
DLUPX96I.DMS
DLCRE22I.DMS
DLCRE13I.DMS
MPUPY675961_05.DMS
MPUPYCRM900_MAINT_LOG5.DMS
```

Note. The DLUPX96I.DMS script will run on your Source database. Remember to edit this script for your Source database. All of the other scripts listed will run against the Target database.

In several steps in the upgrade process, project definitions are copied into the database. Any DB2 z/OS scripts that are built from these project definitions will need to be modified before you run them. Set the following steps in your Change Assistant job to a manual stop and edit the scripts for correct database/tablespace information. When you build the SQL scripts after copying the project, the database/tablespace names are the default values. You need to change these to the Target database specific values. To set a step as a manual stop in Change Assistant, highlight the step and select Edit, Stop from the menu bar.

In chapter 4, "Apply Application Changes," set the step ReCreating Upgrade Tables (in the task Modifying the Database Structure) as a manual stop and edit the UPGCONVERT_CRTTBL.SQL script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 2-2-9: Edit Move to Production Import Scripts

Perform this step only if your database platform is DB2 z/OS.

During the Move to Production, there are several scripts that export data from the previous Copy of Production to the New Copy of Production. These scripts export the tables to a DAT file. When the tables are exported, all the table attributes, including the database-specific information (table owner, database name, and tablespace name), are stored in the DAT file. When you run the import script, it tries to create the tables and indexes using the database-specific information from the DAT file. So even though you ran the import script against your Copy of Production, you would still create tables in the upgraded database (which is the Source database for the Move to Production step). To create the tables in the Target database, open each script listed below, then uncomment and modify all of the DB2-specific statements to reflect your environment.

You will also need to add the following command into MVPRDIMP.DMS, near the end of the script, just after the REPLACE_DATA PSSTATUS command, but before the REPLACE_VIEW PSTEMPTBLCNTVW command, to change *ownerid* to the owner ID of your database.

```
Update PSSTATUS set OWNERID='OWNERID (in uppercase)';
```

Following is a list of the scripts that you need to edit:

```
MVAPPIMP.DMS
MVPRDIMP.DMS
MVCRAIMP.DMS
```

If you prefer, you can copy these overrides from the *xx*DMODBO.DMS script that was generated from DBSetup while installing your database. Make sure you remove the SET NO RECORD if you copy from the DBSetup generated file.

See the Enterprise PeopleTools PeopleBook: Data Management for your new release.

See "Apply Changes to Production Database," Performing the Move to Production.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	DB2 z/OS	All

Task 2-2-10: Edit Move to Production Password

If your access ID and access password are different in the Copy of Production database than in the New Copy of Production database, you need to reset the access password in the MVPRDIMP.DMS script.

To modify passwords in your New Copy of Production database, append the following to your MVPRDIMP.DMS script and replace *ownerID*, *accessID*, and *accesspswd* with your values in the New Copy of Production database:

```
UPDATE PSSTATUS set OWNERID = 'ownerID';
UPDATE PSACCESSPRFL SET ACCESSID = 'accessID',
ACCESSPSWD = 'accesspswd', ENCRYPTED = 0;
ENCRYPT_PASSWORD *;
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	All	All

Task 2-2-11: Edit the DDLDB2 Script

Edit PS_HOME\SCRIPTS\DDLDB2.DMS. At the bottom of this script, you will see an insert into PSDDLDEFPARMS. This insert contains default information used when creating a table, an index, a unique index, or a tablespace. Verify with your database administrator that the last value for each row is appropriate for your environment by checking the values currently stored in your PSDDLDEFPARMS table. Otherwise, the values will be reset to the default values delivered by Oracle in this script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 2-2-12: Edit the DDLDBX Script

Edit PS_HOME\SCRIPTS\DDLDBX.DMS. At the bottom of this script, you will see an insert into PSDDLDEFPARMS. This insert contains default information used when creating a table, an index, a unique index, or a tablespace. Verify with your database administrator that the last value for each row is appropriate for your environment by checking the values currently stored in your PSDDLDEFPARMS table. Otherwise, the values will be reset to the default values delivered by Oracle in this script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 UNIX/NT	All

Task 2-2-13: Edit the DDLORA Script

Edit `PS_HOME\SCRIPTS\DDLORA.DMS`. At the bottom of this script, you will see an insert into PSDDLDEFPARMS. This insert contains default information used when creating a table, an index, a unique index, or a tablespace. Verify with your database administrator that the last value for each row is appropriate for your environment by checking the values currently stored in your PSDDLDEFPARMS table. Otherwise, the values will be reset to the default values delivered by Oracle in this script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-2-14: Edit the DDLIFX Script

Edit `PS_HOME\SCRIPTS\DDLIFX.DMS`. At the bottom of this script, you will see an insert into PSDDLDEFPARMS. This insert contains default information used when creating a table, an index, a unique index, or a tablespace. Verify with your database administrator that the last value for each row is appropriate for your environment by checking the values currently stored in your PSDDLDEFPARMS table. Otherwise, the values will be reset to the default values delivered by Oracle in this script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Informix	All

Task 2-2-15: Edit the MSGTLSUPG Script

Edit `PS_HOME\SCRIPTS\MSGTLSUPG.DMS` and make the necessary modifications as documented in the script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 2-2-16: Edit the Integration Broker Script

Edit PS_HOME\SCRIPTS\PTIBUPGRADE.DMS and make the necessary modifications as documented in the script. User level node security and transactional security have been added as of PeopleSoft PeopleTools 8.48. Service namespace information, a low-level user on the node, and a low-level permission list for service operations, need to be specified. Consult with your Integration Broker specialist for assistance.

Note. If you are upgrading from PeopleSoft PeopleTools 8.48 or later, this step and all of the steps in the task "Converting Integration Broker" do not need to be run because the Integration Broker conversion has already been performed. You need to mark all of these steps as complete in your upgrade job. If you don't mark these steps as complete, the upgrade will try to unnecessarily reconvert your objects.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-2-17: Edit Multilingual Step Properties

In this step, you will edit the Change Assistant step properties for the multilingual PeopleSoft PeopleTools project copy step (or steps). Copy only the translated objects for the languages you license. This prevents the translated objects for unlicensed languages from copying over. You will copy any multilingual projects later in the upgrade process.

Depending on which languages you license, you will need to complete the following instructions once or twice. If you license any of these languages—Arabic, Czech, Danish, Finnish, French, Hebrew, Hungarian, Norwegian, Polish, Russian, or Turkish—perform the following instructions for the step "Export and Copy PPLTLSML Project." If you license any of these languages—Canadian French, Dutch, German, Greek, Italian, Japanese, Korean, Malay, Portuguese, Simplified Chinese, Spanish, Swedish, Traditional Chinese, or Thai—perform the following instructions for the step "Export and Copy PPLTLS84CURML Project."

To edit multilingual step properties:

1. In Change Assistant, select the step.

2. Open the Step Properties dialog box.

3. Click the Upgrade button, and then click the Options button.

4. On the Copy Options tab, deselect any languages that you do not license.

    Common and English should remain deselected.

5. Click OK three times.

6. Save the template in Change Assistant.

See Export and Copy PPLTLS84CURML Project.

See Export and Copy PPLTLSML Project.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All Non-English

Task 2-2-18: Edit Data Type Steps

For PeopleSoft PeopleTools 8.48 and later, new data types are supported for Microsoft SQL Server 2005 or later and Oracle. These data type changes are only available for use in conjunction with PeopleSoft application release 9.0 or later. If you have already converted data types or are upgrading to a PeopleSoft application release earlier than 9.0, you must mark these steps as complete in the template now. Do *not* run these steps unnecessarily.

To set the Data Conversion steps as complete:

1. In Change Assistant, select all the steps within the task Converting Database Data Types.

2. Press the F7 key.

3. Save the upgrade job in Change Assistant.

See Converting Database Data Types.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server Oracle	All

Task 2-3: Updating PeopleTools System Tables

This section discusses:

• Understanding Updating PeopleTools System Tables

• Clean Up Message Data

• Update System Catalog Views

• Update PeopleTools System Tables

• Grant Privileges to the CONNECT ID

• Update the Product License Code

• Update PeopleTools Patch Information

• Create Temporary Performance Indexes

• Export PeopleTools System Tables

• Import PeopleTools System Tables

- Reset Database Options Flag

- Rerun Update Statistics for DB2 zOS

- Rerun RUNSTATS Report for DB2 UNIX NT

- Rerun Update Statistics for DB2 UNIX NT

- Rerun Update Statistics for Informix

- Rerun Update Statistics for Oracle

Understanding Updating PeopleTools System Tables

In this task, you update your PeopleSoft PeopleTools system tables by running various scripts.

Important! From this point forward, run all steps using the new release of PeopleSoft PeopleTools on your Copy of Production database, unless otherwise indicated.

Task 2-3-1: Clean Up Message Data

If you are upgrading from PeopleSoft PeopleTools 8.48 or later, mark this step as complete in your upgrade job and continue with the rest of the upgrade. Do *not* perform any deletes in this step as you will wipe out current valid data that is needed for your system to function properly.

If you are upgrading from PeopleSoft PeopleTools 8.47 or earlier, perform this step to clean out obsolete message data. Message functionality and structure changed as of PeopleSoft PeopleTools 8.48 and the old data is obsolete. Edit PS_HOME\SCRIPTS\PTUPGIBDEL.SQL to delete data from the tables that only exist in the old PeopleSoft PeopleTools release. Open the script and make the following modifications:

1. Search for the string "--- End of PT8.*xx* ---" in which *xx* represents the last two digits of the PeopleSoft PeopleTools release you are upgrading from.

2. Delete the entire portion of the script below this string.

3. Save the script as PS_HOME\SCRIPTS\PTUPGIBDEL8*xx*.SQL in which *xx* represents the last two digits of the PeopleSoft PeopleTools release you are upgrading from, as determined in Step 1.

Important! Save the script using the naming convention shown above. This will preserve the original script for use in updating other databases at different PeopleSoft PeopleTools releases, and assist in running the script automatically.

Follow this procedure to edit your template so that the script can run automatically:

1. Select this step and open the Step Properties dialog box.

2. Change the Script/Procedure value from PTUPGIBDEL8xx to the specific name that you used in Step 3 without the .SQL extension.

3. Change the type from ManualStop to SQLScript, and click OK.

4. In your upgrade job, mark the step as Run.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-3-2: Update System Catalog Views

This step runs the UPDOBJ.SQL script, which re-creates system catalog views that both DataMover and PeopleSoft PeopleTools use.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server	All

Task 2-3-3: Update PeopleTools System Tables

Release scripts are SQL scripts that modify the underlying table structure of a database so that it is compatible with a more recent PeopleSoft PeopleTools release. They are located in the PS_HOME\SCRIPTS directory. Release scripts can be identified by their common naming standard, REL*xxx*.SQL, in which *xxx* designates a PeopleSoft PeopleTools release number.

These release (REL) scripts alter and update your PeopleSoft PeopleTools tables to the current release. Change Assistant determines which REL*xxx* scripts to run based on the PeopleSoft PeopleTools release of your Source and Target databases.

If you created `RELxxxDBTSFIX` (in which *xxx* is a PeopleSoft PeopleTools release) earlier in your upgrade, the procedure will look at your Output folder and will know to run `RELxxxDBTSFIX`. If you did not run `DBTSFIX`, Change Assistant will run `RELxxx`.

Note. Before running this step, verify that the PS_HOME values are set correctly in the Change Assistant environment for your upgrade job. Your new release PS_HOME/SCRIPTS directory should contain all scripts that will be run during this step. This step runs at least one script. Do not proceed to the next step until these scripts run successfully.

See the Enterprise PeopleTools PeopleBook: PeopleSoft Software Updates for your new release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-3-4: Grant Privileges to the CONNECT ID

This step runs the GRANT.SQL script. This script grants select access to the connect ID for tables necessary for sign on.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-3-5: Update the Product License Code

This section discusses:

• Understanding the Product License Code

• Updating the Product License Code

Understanding the Product License Code

The new PeopleSoft release stores your application product license code on the database. This code is used to unlock the pages and Application Engine programs that you licensed. It also provides necessary product information about your database to be used for identifying software maintenance that may need to be applied.

You need to populate the databases that were upgraded to the new PeopleSoft release so that you have the correct access to pages and Application Engine programs that you licensed.

When your new PeopleSoft databases were installed, the appropriate application license code was added to your database in the PSOPTIONS table. This was done in an update statement that was created when DBSETUP was run to create the Data Mover script for the new PeopleSoft release. The location of this script is:

```
PS_HOME\SCRIPTS\DBnameDBplatform.DMS
```

DBname is the name of the Demo database you installed and *DBplatform* represents the database platform using the following chart:

Database Platform	Code Used
Microsoft SQL Server	MSS
DB2 UDB z/OS	DB2
DB2 UDB UNIX/NT	DBX
Oracle	ORA
Informix	INF
Sybase	SYB

Updating the Product License Code

Follow the steps below to update your product license code.

To update the product license code:

1. From the Data Mover script that was created for your new PeopleSoft database installation, copy out the update to PSOPTIONS.

    The statement should look similar to this:

```
update PSOPTIONS set LICENSE_CODE = 'xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx', LICENSE_⇒
GROUP = 'xx';
```

where *'xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx'* equals your license code and *'xx'* equals your license group.

2. Run the SQL command identified above using your SQL tool.

Your database is now updated with the appropriate license code. You can now access the pages and Application Engine programs that you licensed.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-3-6: Update PeopleTools Patch Information

In this step, you update your database with the version of the PeopleSoft PeopleTools patch being applied.

Note. You only need to run this step if you are applying a PeopleSoft PeopleTools patch as part of the upgrade process.

Log on to Data Mover in user mode and run the %PS_HOME\SCRIPTS\PTPATCH.DMS script.

Review the PeopleSoft PeopleTools patch instructions and perform any additional database upgrade instructions that may be listed prior to the copy of the patch project. The patch project will be copied later during the upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-3-7: Create Temporary Performance Indexes

Perform this step only if you are running on a DB2 z/OS platform. This step runs the DB2TMPIDXCREATE script to create multiple indexes for rename performance. You will drop these indexes later in the upgrade process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	DB2 z/OS	All

Task 2-3-8: Export PeopleTools System Tables

The script for this step exports the content of the PeopleSoft PeopleTools tables from the Copy of Production database during your Move to Production passes. During the initial pass, you run programs to convert some objects, like PeopleCode and fields. You perform analysis to decide which objects, such as records and menus, to bring over to your production database and which customized objects to keep. At the end of the initial pass, you reapply customizations or make other changes, such as modifying your permission lists. You do not need to repeat those tasks in the Move to Production pass because this script exports all of your changes to the PeopleSoft PeopleTools objects.

The script name for your upgrade path is:

```
MVPRDEXP.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	MTP	All	All	All

Task 2-3-9: Import PeopleTools System Tables

The script for this step imports the content of the PeopleSoft PeopleTools tables into your New Copy of Production database during your Move to Production passes.

These MVPRD* scripts replace tasks and steps performed in the initial pass. These tasks and steps may include:

- Renaming Records and Fields
- Running New Release Compare Reports
- Running New Release Upgrade Copy

If your RDBMS uses tablespaces, edit this script for the proper DDL information.

The script name for your upgrade path is:

```
MVPRDIMP.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	All	All

Task 2-3-10: Reset Database Options Flag

This step runs UPGDBOPTIONS_DISABLE.SQL, which resets the PSSTATUS.UPGDBOPTIONS flag. The flag is reset only for upgrades where you are coming from a PeopleSoft application release prior to 9.0 and going to a PeopleSoft application release of 9.0 or later with PeopleSoft PeopleTools 8.48 or later. The PeopleSoft PeopleTools upgrade must be applied using the old data types as the data type conversion will occur after the PeopleSoft PeopleTools changes have been completed.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	MS SQL Server Oracle	All

Task 2-3-11: Rerun Update Statistics for DB2 zOS

Earlier in the upgrade process, you updated your statistics for DB2 z/OS. Due to changes in the database structure, you must update statistics again to improve the performance of your compare and copy. Contact your database administrator to have the statistics updated on your database before proceeding with your upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 2-3-12: Rerun RUNSTATS Report for DB2 UNIX NT

This script creates the RUNSTATS.DAT file for the script to update the statistics for DB2 UDB on UNIX, Linux, or Windows.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 UNIX/NT	All

Task 2-3-13: Rerun Update Statistics for DB2 UNIX NT

Earlier in the upgrade process, you updated your statistics for DB2 UDB on UNIX, Linux, or Windows. Due to changes in the database structure, you must update statistics again to improve the performance of your compare and copy. This step runs RUNSTATS.SQL to update statistics on your database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 UNIX/NT	All

Task 2-3-14: Rerun Update Statistics for Informix

Earlier in the upgrade process, you updated your statistics for Informix. Due to changes in the database structure, you must update statistics again to improve the performance of your compare and copy. This step runs UPDATESTATS to update statistics on your database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Informix	All

Task 2-3-15: Rerun Update Statistics for Oracle

Earlier in the upgrade process, you updated your statistics for Oracle. Due to changes in the database structure, you must update statistics again to improve the performance of your compare and copy. Contact your database administrator to have the statistics updated on your database before proceeding with your upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-4: Turning Off Change Control

This task executes a SQL statement that turns off the Change Control feature to improve performance for the upgrade copy. One of the tasks for completing database changes will remind you to turn this feature on again, if you want to use it.

Note. Move to Production: The Change Control feature slows down copy functions. The large copy projects are executed only during the initial pass and the feature is disabled only for the initial pass.

See "Complete Database Changes," Reviewing Change Control.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-5: Loading Model Definition Data

This section discusses:

- Understanding Model Definition Data Load Process

- Load Model Definitions for DB2 zOS

- Load Model Definitions for DB2 UNIX NT

- Load Model Definitions for Oracle
- Load Model Definitions for Informix
- Load Model Definitions for Microsoft
- Load Model Definitions for Sybase

Understanding Model Definition Data Load Process

In this task, you load model definition scripts for your database platform and populate DDL model definitions. This step runs the DDL model definition script applicable to your database platform. If required by your database platform, you modified this script in the task "Performing Script Modifications," to use your site-specific information.

See Performing Script Modifications.

Task 2-5-1: Load Model Definitions for DB2 zOS

This step runs the DDLDB2.DMS script to populate DDL model definitions for the DB2 z/OS platform.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 2-5-2: Load Model Definitions for DB2 UNIX NT

This step runs the DDLDBX.DMS script to populate DDL model definitions for DB2 UDB on UNIX, Linux, or Windows.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 UNIX/NT	All

Task 2-5-3: Load Model Definitions for Oracle

This step runs the DDLORA.DMS script to populate DDL model definitions for the Oracle platform.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-5-4: Load Model Definitions for Informix

This step runs the DDLIFX.DMS script to populate DDL model definitions for the Informix platform.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Informix	All

Task 2-5-5: Load Model Definitions for Microsoft

This step runs the DDLMSS.DMS script to populate DDL model definitions for the Microsoft SQL Server.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server	All

Task 2-5-6: Load Model Definitions for Sybase

This step runs the DDLSYB.DMS script to populate DDL model definitions for the Sybase platform.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Sybase	All

Task 2-6: Loading Message Data

This step loads system messages in the message catalog.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-7: Reviewing PeopleTools Objects

Run this task to identify any PeopleSoft PeopleTools objects that you have customized. This task only identifies the customized PeopleTools objects. You still must overwrite the customized objects with the new PeopleSoft PeopleTools definitions when you copy the project.

During the upgrade process, you copy PeopleSoft PeopleTools objects into your database. PeopleSoft PeopleTools functionality, such as Security, is built using PeopleSoft PeopleTools objects and it is possible that you could have modified the objects that make up a product like Security.

Warning! Do not change the delivered PeopleSoft PeopleTools objects. The delivered objects are integral to the smooth operation of your system, and the modification of these objects could cause system instability.

When you perform the copy of the PeopleSoft PeopleTools projects during the upgrade, you may overwrite modifications that you have made. Excluding any PeopleSoft PeopleTools-delivered objects from the upgrade may result in instability due to dependencies on specific objects.

To review PeopleSoft PeopleTools objects:

1. Open the PPLTLS84CUR project on your Source database.

   a. Launch Application Designer and sign on to the Demo (Source) database.

   b. Select File, Open...

   c. In the Definition field, select Project and click Open to display a list of projects.

   d. Select the PPLTLS84CUR project and click Open.

2. If the PPLTLS84CUR project does not exist on your Demo (Source) database, then copy the project definition; otherwise continue to the next step.

   a. Select Tools, Copy Project, From File...

   b. In the resulting dialog box, change the import directory to *PS_HOME*\PROJECTS, select PPLTLS84CUR from the list of projects and click the Open button.

   c. The Copy dialog box appears. Click the Deselect All button and then click the Copy button.

   When the progress dialog disappears, the project definition has been copied.

3. On your Source database, make a copy of the PPLTLS84CUR project and name it PPLTLS84CURCOMP.

   You will use this project for the compare process.

   a. If the PPLTLS84CUR project is not open, open it now.

   b. Select File, Save Project As…

   c. Name the project PPLTLS84CURCOMP.

4. On your Source database, perform a project compare of the PPLTLS84CURCOMP project against your Target database.

   a. If the PPLTLS84CURCOMP project is not open, open it now.

   b. Select Tools, Compare and Report…

   c. Sign on to the Target database.

   d. Verify that all object types are selected.

   e. Select Options…

   f. On the Compare Options tab, select Compare Type of Project.

   g. Select a value for Target Orientation.

   h. For Comparison by Release, select the highest release in the list.

   i. Under Compare Languages, select Common and English.

j.   If you have non-English languages loaded, select the other languages loaded into your database.

k.   Select the Report Filter tab and click Default.

    This will cause only customizations to appear on the compare reports.

l.   Click OK.

m.   Click Compare to start the compare process.

> **Note.** To preserve the PPLTLS84CURCOMP compare reports, you must perform one of the following actions: 1) rename the reports, 2) move the reports to a different folder, or 3) reset the Compare Report Output Directory: Within Application Designer, select Tools, Options. On the General tab, change the path specified for the Report Output Directory.

5.   Evaluate the compare reports to identify whether the delivered objects conflict with any of your customizations.

    You will overwrite the customized objects with the new PeopleSoft PeopleTools definitions when you copy the PeopleSoft PeopleTools projects in a later task. You must not make any modifications that will affect PeopleSoft PeopleTools objects when reimplementing your customizations after the upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-8: Exporting and Copying Projects

This section discusses:

• Understanding Exporting and Copying Projects

• Export and Copy PPLTLS84CUR Project

• Export and Copy PPLTLS84CURML Project

• Export and Copy PPLTLSML Project

• Export and Copy PPLTLS84CURDEL Project

• Export and Copy PATCH84X Project

• Export and Copy PATCH84XML Project

Understanding Exporting and Copying Projects

In this task, you export and copy projects.

Oracle recommends that you verify the results of all copied projects. After a project has been copied, each object is identified with a checkmark in the Done column. You can view these results from the Upgrade tab in Application Designer. It is also recommended that you copy the PeopleSoft PeopleTools projects with the take action flags set as they originally were set when the database was delivered.

Note. If you are running Sybase, check the configuration parameter for "open objects." If this parameter is set too low, you may encounter the following error: `ct_connect(): network packet layer: internal net library error` during the compare or copy process. If you encounter this error, you will need to increase your parameter accordingly.

See the Enterprise PeopleTools PeopleBook: PeopleSoft Application Designer for your new release.

Task 2-8-1: Export and Copy PPLTLS84CUR Project

This process copies specified objects to the database that are necessary for the proper operation of PeopleSoft PeopleTools. The PPLTLS84CUR project contains all PeopleSoft PeopleTools objects that have been created or updated since PeopleSoft PeopleTools 8.40 was released.

Before the copy of records and fields, the upgrade process detects if the object definition exists or not. The PPLTLS84CUR project is delivered with an action of `CopyProp` to prevent the possible overwrites of custom field labels and recfields. When the upgrade process detects that a given field or record does not exist, it changes that action so that the entire definition can be copied. You can ignore any errors that you may receive at this time similar to the following examples:

```
Changed Action from CopyProp to Copy, definition does not exist on target.
Definition Name: OBJECTNAME not copied, entire definition already copied.
```

These warnings occur because the PeopleSoft PeopleTools project contains fields along with their field label. This is necessary so that the software does not overwrite any customized field labels on PeopleSoft field objects.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-8-2: Export and Copy PPLTLS84CURML Project

This process copies language-specific PeopleSoft PeopleTools objects to the database that are necessary for the proper operation of PeopleSoft PeopleTools.

Before the copy of records and fields, the upgrade process detects if the object definition exists or not. The PPLTLS84CURML project is delivered with an action of `CopyProp` to prevent the possible overwrites of custom field labels. When the upgrade process detects that a given field does not exist, it changes that action so that the entire definition can be copied. You can ignore any errors that you may receive at this time similar to the following example:

```
Changed Action from CopyProp to Copy, definition does not exist on target.
Definition Name: OBJECTNAME not copied, entire definition already copied.
```

This warning occurs because the PeopleSoft PeopleTools project contains fields along with their field label. This is necessary so that the software does not overwrite any customized field labels on PeopleSoft field objects.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	Canadian French
				Dutch
				Greek
				German
				Italian
				Japanese
				Korean
				Portuguese
				Simplified Chinese
				Spanish
				Swedish
				Traditional Chinese
				Thai
				Malay

Task 2-8-3: Export and Copy PPLTLSML Project

This process copies language-specific PeopleSoft PeopleTools objects to the database that are necessary for the proper operation of PeopleSoft PeopleTools.

Before copying records and fields, the upgrade process detects whether the object definition exists. The PPLTLSML project is delivered with an action of CopyProp to prevent the possible overwrites of custom field labels and recfields. When the upgrade process detects that a given field or record does not exist, it changes that action so that the entire definition can be copied. You can ignore any errors that you may receive at this time similar to the following examples:

```
Changed Action from CopyProp to Copy, definition does not exist on target.
Definition Name: OBJECTNAME not copied, entire definition already copied.
```

These warnings occur because the PeopleSoft PeopleTools project contains fields along with their field labels. This is necessary so that the PeopleSoft system does not overwrite any customized field labels on PeopleSoft field objects.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	Arabic
				Czech
				Danish
				Finnish
				French
				Hebrew
				Hungarian
				Norwegian
				Polish
				Russian
				Turkish

Task 2-8-4: Export and Copy PPLTLS84CURDEL Project

This process deletes specified PeopleSoft PeopleTools objects from your database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-8-5: Export and Copy PATCH84X Project

This process copies specified objects to the database that are necessary for the proper operation of PeopleSoft PeopleTools.

Note. Perform this process only if you are applying a PeopleSoft PeopleTools patch that includes a database project. Check the patch documentation to verify whether a database project was delivered with the patch.

Use Application Designer to perform the following steps.

To export and copy the project:

1. Log on to your Target database as a valid user.

2. Select Tools, Copy Project, From File…

3. In the Import Directory field, enter *PS_HOME\PROJECTS*.

4. Select the PATCH84*X* project from the list, in which 84*X* corresponds to the PeopleSoft PeopleTools release of the patch project.

   This should correspond with the PeopleSoft PeopleTools release to which you are upgrading.

5. Select Options; select the languages Common and English *only.*

6. Select Copy to begin copying updated PeopleSoft PeopleTools objects to your database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-8-6: Export and Copy PATCH84XML Project

This process copies language-specific PeopleSoft PeopleTools objects to your database that are necessary for the proper operation of PeopleSoft PeopleTools.

Note. Perform this process only if you are applying a PeopleSoft PeopleTools patch that includes a database project. Check the patch documentation to verify whether a multilingual database project was delivered with the patch.

Use Application Designer to perform the following steps.

To export and copy the project:

1. Log on to your Target database as a valid user.

2. Select Tools, Copy Project, From File…

3. In the Import Directory field, enter *PS_HOME\PROJECTS*.

4. Select the PATCH84*X*ML project from the list, where 84*X* represents the PeopleSoft PeopleTools release of the patch project.

   This should correspond to the PeopleSoft PeopleTools release to which you are upgrading.

5. Click Options, and then select the Copy Options tab and verify that only the non-English languages that are installed are selected.

   Note. The languages English and Common should not be selected.

6. Click OK.

7. Click Copy.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All Non-English

Task 2-9: Populating Tablespace Data

This section discusses:

- Create Application Tablespaces
- Populate Tablespace Data
- Update Tablespace Names

Task 2-9-1: Create Application Tablespaces

During each Move to Production pass, you must create any new tablespaces. You can reuse the same script created during the initial pass when you created new tablespaces, or you can build a new one if you plan to use different tablespaces on your production system.

See "Apply Application Changes," Updating Database Overrides, Create New Tablespaces.

The script supplied by Oracle to create tablespaces for your upgrade is:

```
CRDDL.SQL (CRDDLU.SQL for DB2 z/OS Unicode)
```

Important! For DB2 UNIX/NT sites, the script name is `CRDDLDMS.SQL` for ANSI, and `CRDDLDMSU.SQL` for Unicode.

Once you have determined which script to run during Move to Production, you can change this step to run automatically.

To run the Create Application Tablespaces step automatically:

1. In Change Assistant, open your upgrade job.

2. In the task Populating Tablespace Data, right-click on the step Create Application Tablespaces, and then select Step Properties.

3. In the Step Properties dialog box, change the value in the Type field from *ManualStop* to *SQLScript*.

4. In the Script/Procedure field, enter the name of the script you want to run and click OK.

5. Select Edit, Run.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	Oracle Informix DB2 UNIX/NT DB2 z/OS	All

Task 2-9-2: Populate Tablespace Data

This step populates all tablespace information in the PSRECTBLSPC table. This step runs the SETSPACE.SQR script, which ensures that the correct tablespace information is populated for tasks later in the upgrade process.

The values stored in the DDLSPACENAME field are updated with current values found in the system catalog for tables already defined in your database. If you modified tablespace names from the Oracle-delivered names, this step makes those same changes in the PeopleSoft record definition.

If you receive any errors when you run this script, correct them by creating the needed tablespace or changing the tablespace definition on the record object. Then run the script again to validate that you have created all tablespaces.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle Informix DB2 UNIX/NT DB2 z/OS	All

Task 2-9-3: Update Tablespace Names

The SETSPACE SQR script identifies the tables with an invalid database name/tablespace combination. However, the PeopleTools Metadata tables in your Copy of Production (Target) database contain the database/tablespace values from the Demo (Source) database. This also occurs if your Demo and Copy of Production databases are in the same DB2 subsystem after the upgrade/copy is completed. SETSPACE.SQR corrects these values for those tables defined in DB2. For those tables that are defined in the PeopleTools metadata tables, but have not been defined in DB2, you need to review the SETSPACE SQR script for those tables that are reported as not defined in the database, but where the database/tablespace combination is valid. If the report shows an invalid database/tablespace combination, or shows your Demo (Source) database and tablespace names instead of your Copy of Production (Target) database and tablespace names, you can correct the database and tablespace names using one of the following options:

- Generate the alter/create scripts and globally edit the scripts, changing the database/tablespace values to those of your Copy of Production.

- Directly update the PSRECTBLSPC table with your Target database names before generating the alter/create scripts.

  This will ensure that the database name/tablespace names in the generated alter/create scripts will be correct. The syntax to update the PSRECTBLSPC table is as follows:

  ```
  UPDATE PSRECTBLSPC SET DBNAME = dbname, DDLSPACENAME = tablespace name WHERE⇒
   DDLSPACENAME = tablespace identified in SETSPACE OUTPUT AND DBNAME = database⇒
   identified in SETSPACE OUTPUT;
  ```

If you are using the Oracle-delivered tablespaces, you can omit the references to DDLSPACENAME in the SQL statement above.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 2-10: Building Updated PeopleTools Project

This section discusses:

- Generate Updated PeopleTools Script

- Edit the Updated PeopleTools Script

- Run the Updated PeopleTools Script

Task 2-10-1: Generate Updated PeopleTools Script

This step generates the SQL script to create and alter records of the type Table that are delivered in the
PPLTLS84CUR project. The tables are altered to add new columns, rename existing columns, and change
columns that have modified properties, such as length, and delete columns. The script will also create new
indexes, re-create modified indexes, and create triggers. The script name is:

```
PPLTLS84CURTABLES.SQL
```

Note. For DB2 z/OS sites, if this step takes an exceptionally long time, performing a RUNSTATS on the
system catalog tablespace SYSDBASE may improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-10-2: Edit the Updated PeopleTools Script

In this step, you edit the PPLTLS84CURTABLES.SQL script that was generated in the previous step for
tablespace names and sizing. If you are running on a RDBMS platform that uses tablespaces, and you are
not using the PeopleSoft tablespace names, have your database administrator review this script and modify
the tablespace names appropriately. The script can be found in your Change Assistant output directory for
this upgrade path.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS DB2 UNIX/NT Oracle Informix	All

Task 2-10-3: Run the Updated PeopleTools Script

This step runs the script you generated in this task to create all records of the type Table. This creates new table structures, alters existing PeopleSoft table structures, creates new indexes, re-creates modified indexes, and creates triggers.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-11: Migrating Records to New Tablespaces

This section discusses:

* Understanding Migration of Records to New Tablespaces

* Export and Copy the PT84TBLSPC Project

* Build the Tablespace Alter Script

* Edit the Tablespace Alter Script

* Run the Tablespace Alter Script

Understanding Migration of Records to New Tablespaces

In this task you migrate the tables delivered in the PT84TBLSPC project to the correct tablespaces.

Task 2-11-1: Export and Copy the PT84TBLSPC Project

This process copies the records that moved to different tablespaces in the new release of PeopleSoft PeopleTools. The upgrade copy options are set to Copy From Source for record DDL to pick up the new tablespace information.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	DB2 z/OS DB2 UNIX/NT Oracle Informix	All

Task 2-11-2: Build the Tablespace Alter Script

This step generates the SQL script to alter records of the type Table that are delivered in the PT84TBLSPC project. The tables are altered to move them to the correct tablespaces for the new release of PeopleSoft PeopleTools. The script name is:

    TABLESPACEALTERTABLES.SQL

Note. For DB2 z/OS sites, if this step takes an exceptionally long time, performing a RUNSTATS on the system catalog tablespace SYSDBASE may improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS DB2 UNIX/NT Oracle Informix	All

Task 2-11-3: Edit the Tablespace Alter Script

In this step, you edit the TABLESPACEALTERTABLES.SQL script for tablespace names and sizing. If you are running on an RDBMS platform that uses tablespaces, and you are *not* using the PeopleSoft tablespace names, you need to review and modify the scripts above. Have your database administrator review these scripts and modify the tablespace names appropriately. The script can be found in your Change Assistant output directory for this upgrade path.

Note. If you are a DB2 z/OS customer, you must edit the scripts for database name regardless of whether you are using the delivered PeopleSoft tablespace names.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS DB2 UNIX/NT Oracle Informix	All

Task 2-11-4: Run the Tablespace Alter Script

This step runs the TABLESPACEALTERTABLES.SQL script to move the tables to the new tablespaces.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS DB2 UNIX/NT Oracle Informix	All

Task 2-12: Loading Base Data

These Data Mover scripts (DMSs) initialize and modify the data in various PeopleSoft PeopleTools tables required for the system to execute properly. This step runs scripts conforming to the PT*xxx*TLS.DMS and PT*xxx*TLS*yyy*.DMS naming conventions, where *xxx* represents a PeopleSoft PeopleTools release number and *yyy* represents a three-letter language code, that are greater than your current PeopleSoft PeopleTools release. For some upgrades, no data scripts are required. In this case, Change Assistant continues to the next step without producing a log file.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-13: Loading Language Data

This section discusses:

- Populate Languages

- Load Language Data

Task 2-13-1: Populate Languages

This step runs the PSLANGUAGES.DMS script. This script populates the PSLANGUAGES table with Verity Locale data and other language-specific data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-13-2: Load Language Data

If your database has languages installed in addition to English, you must populate the PSLANGUAGES table.

To load language data:

1. From the DMS that was created for your PeopleSoft 8.x database installation, find the UPDATE to PSLANGUAGES.

   The statement should look similar to the following:

   ```
   UPDATE PSLANGUAGES SET INSTALLED=1 WHERE LANGUAGE_CD = 'xxx';
   ```

2. Run the SQL command identified above using your SQL tool.

   Your database is now updated with the language data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All Non-English

Task 2-14: Loading PeopleTools Data

This section discusses:

- Load NonComparable Objects

- Load English Messages

- Load English String Data

- Load Stored Statements Data

Task 2-14-1: Load NonComparable Objects

This step runs the TLSUPGNONCOMP.DMS script. This script loads the TLSUPGNONCOMP project and all PeopleSoft PeopleTools-owned object definitions that cannot be delivered using Copy Project to File.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-14-2: Load English Messages

This step runs the MSGTLENG.DMS script, which loads English messages into your database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-14-3: Load English String Data

This step runs the PTSTRENG.DMS script, which loads English string data into the STRINGS_TBL table.

Note. The non-English language data was loaded in the task Loading Base Data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-14-4: Load Stored Statements Data

Loading the stored statements ensures that the dynamic SQL statements will work correctly with the delivered COBOL programs.

This step runs the STOREPT.DMS script, which loads the dynamic SQL used by the PeopleSoft PeopleTools-delivered COBOL.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-15: Loading PeopleTools Definition Group

This task runs the PTDEFNSEC.DMS script that loads the PeopleTools definition security group. This ensures that the definition security group is updated with the PeopleTools objects introduced in this release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-16: Converting PeopleTools Objects

This section discusses:

- Update REN Server Configuration
- Populate MCF Data
- Convert Portal Objects
- Convert Query Prompt Headings
- Encrypt Connector Passwords
- Load Conversion Data
- Report Conversion Details
- Run Data Conversion

Task 2-16-1: Update REN Server Configuration

This step runs the Application Engine program UPGMCF843, which converts real-time event notification (REN) server configuration information to the new format. REN servers run in the application server domain. They are used for the PeopleSoft PeopleTools MultiChannel Framework (MCF) and Reporting Window output option. The program converts standard REN server configurations to the new format, including MCF cluster information. All REN server configuration information is now stored within the database. You must upgrade old REN server configurations before attempting to boot with the new version of PeopleSoft PeopleTools. If you did not have any REN servers configured prior to starting the upgrade, then the UPGMCF843 program does not make any changes. If one of your configurations cannot be converted, error messages will be written in the Application Engine message log.

After running this step, you should also check the PSRENCONFIG.TXT file located in each application server domain that started an old REN server. (The file will not exist in domains that did not start a REN server.) Each old file should be replaced with the new template file located at PS_HOME/APPSERV/REN/PSRENCONFIG.TXT. Old template files cannot be used with the new version of REN server. If you customized your old configuration files, manually edit the new files and update them with your customizations.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-16-2: Populate MCF Data

This step runs the Application Engine program MCF_UPGR_SND, which populates the PS_MCFEM_MAIL_DSCR table with data. In PeopleSoft PeopleTools 8.44, the REPLY_TO header functionality was added. The field PS_MCFEM_MAIL_DSCR.MCF_REPLY_TO is populated with the values stored in PS_MCFEM_MAIL_MAIN.MCF_EMAIL_SENDER.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-16-3: Convert Portal Objects

This step runs the Application Engine program UPG844PORTAL, which splits PSPRSMDEFN.PORTAL_ URLTEXT into segments and stores them in separate columns: PORTAL_URI_SEG1, PORTAL_URI_SEG2, PORTAL_URI_SEG3, and PORTAL_URI_SEG4. This is performed for PeopleSoft Component URLs to extract values for Menu, Component, and Market. Values for Record, Field, Event, and Function Names are extracted from PeopleSoft URLs.

You may see some errors or messages in your log. Following is a list of some of the errors and what to do about them:

- `Not authorized CRef:` *`Portal Object Name`* `(95,5032).`

  This means that you do not have proper privileges to run this conversion. You need to grant the user ID that you are using to upgrade Portal Administrator permissions.

- `Security synchronization failed for Portal Object:` *`Portal Object Name`* `(96,61).`

  This is not a fatal error. It may be caused by a content reference that contains invalid URL text and indicates that there was an internal error writing to the security table. The invalid URL text may be pointing to a component or script that does not exist in the database. You need to fix the content reference and then rerun the UPG844PORTAL process.

- `Cref` *`Portal Object Name`* `points to Menu:` *`Menu Name`*`, Component` *`Component Name`* `which doesn't exist. (96,80).`

  The content reference is pointing to an invalid Menu/Component combination. You need to fix the content reference so that it points at a valid Menu/Component combination and then rerun the UPG844PORTAL process.

- `Duplicate key. Portal:` *`Portal Name`*`, Obj Name:` *`Portal Object Name`*`, Nodename:` *`Node`*`, URL:` *`URL`* `(133,4).`

  This portal object has the same URL as another portal object. Delete or modify this object to remove the conflict and then rerun the UPG844PORTAL process.

See the Enterprise PeopleTools PeopleBook: Internet Technology for your new release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-16-4: Convert Query Prompt Headings

This step runs the Application Engine program UPGQRYDUPHED, which searches for duplicate prompt headings in the table PSQRYBIND and appends numbers onto the text. For example, *Item ID* would become *Item ID 2*. When you run Crystal 9 through the process scheduler, it cannot handle queries with two or more prompts that have the same heading. These duplicates are also not legal in Query. You need to alter any old queries that have duplicate prompt headings so that they work with Crystal 9.

If you find a duplicate heading that exceeds the length of the field HEADING, you need to change the heading manually. In these cases, the following error is written to the log file:

```
The prompt heading HEADING for Query QUERY is duplicated. Please manually correct.⇒
(108, 1108)
```

See the Enterprise PeopleTools PeopleBook: PeopleSoft Query for your new release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-16-5: Encrypt Connector Passwords

This step runs the Application Engine program UPGRDPASSWDS, which encrypts the password property field for the POP3Target, FTPTarget, GetMailTarget, and JMSTarget connectors.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-16-6: Load Conversion Data

This step imports PeopleSoft PeopleTools data conversion Application Engine driver data into your database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-16-7: Report Conversion Details

This step runs the PTUCONV.SQR script. It details which sections will be called by the Upgrade Driver program and what they are doing. Each of the upgrade data conversion sections contains comments that describe the processing done by the section. The information contained in the report is used to evaluate the conversions run in the next step and any actions that are required as a result of the conversion.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-16-8: Run Data Conversion

The Upgrade Driver Application Engine program, PTUPGCONVERT, runs additional PeopleSoft PeopleTools upgrade data conversions. The program then reads the table PS_PTUPGCONVERT, selecting all rows with the group number of 01 and ordering them by the sequence number on the row. A list of Application Engine library sections that must be run for data conversion is returned. The program then calls each section in the order of the sequence number. Review the output file generated in the previous step for more details on the conversions run in this step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-17: Creating PeopleTools Views

This section discusses:

• Create Updated PeopleTools Views

Task 2-17-1: Create Updated PeopleTools Views

This step creates all views defined in the PPLTLS84CUR project. These are PeopleTools views that have changed and are required for tasks later in the upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-18: Converting Integration Broker

This section discusses:

- Understanding Converting Integration Broker
- Updating Integration Broker Defaults
- Creating Integration Broker Objects
- Saving Application Messaging Objects
- Exporting Node Transactions
- Preparing Integration Broker Deletes
- Deleting Application Messaging Objects
- Deleting Node Transactions

Understanding Converting Integration Broker

If you are upgrading from PeopleSoft PeopleTools 8.48 or later, this task does not need to be run because the Integration Broker conversion has already been performed. You need to mark all of the steps in this task as complete in your upgrade job. If you don't mark these steps as complete, the upgrade will try to unnecessarily reconvert your objects.

Task 2-18-1: Updating Integration Broker Defaults

This step runs the PTIBUPGRADE.DMS script. This script populates the default values specified earlier in the upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-18-2: Creating Integration Broker Objects

The PeopleSoft PeopleTools Upgrade Driver Application Engine program, PTUPGCONVERT, runs additional PeopleSoft PeopleTools upgrade data conversions. The program then reads the table PS_PTUPGCONVERT, selecting all rows with a group number of 03 and ordering them by the row sequence number. A list of Application Engine library sections that must be run for data conversion is returned. The program then calls each section in the sequence number order. Review the report generated by PTUCONV.SQR for details on the conversions run in this step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-18-3: Saving Application Messaging Objects

This step copies the PTUPGIBCLONE project to the *PS_HOME*\projects directory. This project was created by the UPGPT848IBUG Application Engine program and contains objects that were successfully converted. The objects are copied to file as a precautionary measure because they will be deleted from the upgrade database.

After running this step, save the exported project in a permanent location where it can be accessed post-upgrade in case there is a need to review or import the old objects.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-18-4: Exporting Node Transactions

This step runs PTUPG_TRX_EXPORT.DMS to save out the old preconversion node transaction data. The generated .dat file is written to the DataMover output directory defined in Configuration Manager, which should be your *PS_HOME*\data directory.

After running this step, save PTUPG_TRX_EXPORT.DAT in a permanent location where it can be accessed post-upgrade in case there is a need to review or import the old objects.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-18-5: Preparing Integration Broker Deletes

This step copies the PTUPGIBDELETE project to your *PS_HOME*\projects directory in preparation for deleting the obsolete pre-conversion object definitions from the upgrade database. This project was created by the UPGPT848IBUG Application Engine program and contains the same objects as PTUPGIBCLONE.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-18-6: Deleting Application Messaging Objects

This step copies the PTUPGIBDELETE project definition from file. Since the actions in the project are set to Delete, this will delete the obsolete preconversion object definitions from the upgrade database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-18-7: Deleting Node Transactions

This step runs PTUPG_TRX.DMS, which removes obsolete node transaction data associated with the obsolete objects in the PTUPGIBDELETE project. This script was generated by the UPGPT848IBUG Application Engine program.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 2-19: Setting Object Version Numbers

In this task, you run the VERSION Application Engine program. This ensures that all of your version numbers are correct and, if not, resets them to 1.

Note. You will rerun the VERSION application engine program later in the upgrade. If you want to preserve the log files generated by Change Assistant from this run, you will need to rename the files manually after completing this task.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 2-20: Converting Database Data Types

This section discusses:

- Understanding Converting Database Data Types
- Backing Up Before Platform Changes
- Running Long Data Audit
- Validating Microsoft Database
- Reviewing Microsoft Settings
- Creating Microsoft Conversion Project
- Generating Microsoft Conversion Script
- Running Microsoft Conversion Script
- Granting Permissions to the CONNECT ID
- Running Microsoft Conversion Report
- Validating Oracle Database
- Creating Oracle Audit Tables
- Auditing Duplicate Length Constraints
- Auditing Disabled Constraints
- Reviewing Oracle Settings
- Generating Oracle Conversion Scripts
- Running Long to LOB Script 1
- Running Long to LOB Script 2
- Running Long to LOB Script 3
- Running Long to LOB Script 4
- Running Long to LOB Script 5
- Running Long to LOB Script 6
- Running Long to LOB Script 7
- Running Long to LOB Script 8
- Auditing Long to LOB Conversion
- Running Character Length Script 1
- Running Character Length Script 2
- Running Character Length Script 3
- Running Character Length Script 4
- Running Character Length Script 5
- Running Character Length Script 6

- Running Character Length Script 7

- Running Character Length Script 8

- Auditing Character Length Semantics

- Reviewing Conversion Reports

- Updating Database Options

Understanding Converting Database Data Types

As of PeopleTools 8.48, new database data types are supported for Microsoft SQL Server 2005 or later and Oracle 9i or later. These data type changes are mandatory but only available for use in conjunction with application releases 9.0 or later.

For Microsoft SQL Server 2005 and later, the data types VARCHAR, NVARCHAR, VARBINARY(MAX), and VARCHAR(MAX) are now supported. Databases on Microsoft SQL Server 2000 and earlier will not use these new data types. The data types as defined in Application Designer are not changed; only the database-level definition will be different:

- Records with fields defined as PeopleSoft CHAR(N) will now use VARCHAR(N).

- Records with fields defined as PeopleSoft NCHAR(N) will now use NVARCHAR(N).

- Records with fields defined as PeopleSoft Long Character(N) will now use VARCHAR(N) if N is <=4000 and VARCHAR(MAX) if N is > 4000 for non-Unicode.

- Records with fields defined as PeopleSoft Long Character(N) will now use NVARCHAR(N) if N is <=4000 and VARCHAR(MAX) if N is > 4000 for Unicode databases.

- Records with fields defined as PeopleSoft IMAGE will now use VARBINARY(MAX).

For Oracle 9i or later, the data types CLOB and BLOB are now supported. In addition, the Character Length Semantics feature is also supported for Unicode databases when creating PeopleSoft CHAR fields and LONG CHARACTER fields with specified lengths less than 1334:

- Records with fields defined as PeopleSoft IMAGE or PeopleSoft LONG CHARACTER with Raw Binary will now use BLOB.

- Records with fields defined as PeopleSoft LONG CHARACTER with no length specified, length greater than 1333(UNICODE), or length greater than 4000 (ANSI) will now use CLOB.

Task 2-20-1: Backing Up Before Platform Changes

Back up your upgrade database now. This enables you to restart your upgrade from this point, in case you experience any database integrity problems during the remaining tasks in the upgrade process.

Important! For Oracle platforms, contact your database administrator to update the statistics on the database catalog. This will improve performance for subsequent steps in the upgrade. Typically only the users sys and sysdba have the authority to perform this task.

The following command updates the statistics on the database catalog:

```
EXEC DBMS_STATS.GATHER_SCHEMA_STATS('SYS');
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server Oracle	All

Task 2-20-2: Running Long Data Audit

This step runs LONGS-AUDIT.SQL, which audits for any fields exceeding the actual data length for PeopleSoft long character columns. You will review the output in a later step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server	All

Task 2-20-3: Validating Microsoft Database

This step runs DBSETTINGS.SQL, which checks the Microsoft SQL Server version. The data type conversion is supported only with Microsoft SQL Server 2005 or later. You will review the output in a later step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server	All

Task 2-20-4: Reviewing Microsoft Settings

If you are upgrading to a PeopleSoft 9.0 or later application release, the data type update *and* a minimum of Microsoft SQL Server 2005 are required. You will run a conversion process that will substitute the old data types for new ones. The data type conversion is supported for Microsoft SQL Server 2005 or later with PeopleTools 8.48 or later and an application release 9.0 or later. Examine the log file from the step Validating Microsoft Database to ensure that you are running a supported version of Microsoft SQL Server. Do *not* perform the rest of this task if you do not meet the qualifications.

Examine the log file from the step Running Long Data Audit to determine if there are any fields shorter than length 4000 in the database that exceed the actual data length defined for the PeopleSoft long character fields. Prior to PeopleTools 8.48, all PeopleSoft long character fields were created using the TEXT SQL Server data type, and no matter the length defined by the Application Designer, the data in the field could grow as much as the TEXT limits on SQL Server. After the data type conversion, the length specified in Application Designer will be enforced for all fields shorter than length 4000, except for those with length zero. If your data is larger than the length defined in Application Designer, then you must correct the length using Application Designer or change the data itself using your SQL query tool. You must decide whether you want a change in the field length definition or a change in the data. The log file created by LONGS-AUDIT.SQL will only show all of the fields that contain data exceeding a length between 1 and 4000 and will be empty if this condition does not occur with no other action to take.

Resolve these problems before continuing to the next step, otherwise the conversion process will fail. If necessary, contact your DBA for assistance in modifying the fields. If no fields are listed in the log file, no further action is needed and you may proceed with the upgrade.

Note. During Move to Production passes, copy MSSNEWTYPE_ALTER.SQL from your initial pass upgrade's output directory and place it into the output directory for your Move to Production pass. This script is only generated during the initial pass. Edit the script and correct the database name on the first line of the script to point to the Target database for the pass.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server	All

Task 2-20-5: Creating Microsoft Conversion Project

This step runs MSSNEWTYPE.SQL, which generates and populates the MSSNEWTYPE project. The project contains all of the records that need to be modified to use the newly supported data types.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	MS SQL Server	All

Task 2-20-6: Generating Microsoft Conversion Script

This step generates the SQL script MSSNEWTYPE_ALTER.SQL to alter the records in the MSSNEWTYPE project. The generated script will alter the tables with the new data types.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	MS SQL Server	All

Task 2-20-7: Running Microsoft Conversion Script

This step runs the generated script from the previous step. This will alter the existing tables to use the new data types. All of the tables will be copied into their new representation using the new data types and all of the additional padding blanks derived from the use of the old data types will be truncated.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server	All

Task 2-20-8: Granting Permissions to the CONNECT ID

This step runs the GRANT.SQL script. This script grants select access to the CONNECT ID for tables necessary for sign on.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server	All

Task 2-20-9: Running Microsoft Conversion Report

This step runs CONVERSION-AUDIT.SQL, which audits for all unconverted fields. You will review the output in a later step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server	All

Task 2-20-10: Validating Oracle Database

This step runs the DBSETTINGS.SQL script, which queries the database to determine the value of the NLS_LENGTH_SEMANTICS parameter. You will review the output in a later step.

There are two possible conversions that may occur depending on whether or not the database is Unicode. The Long to LOB conversion will apply to all databases, Unicode or ANSI. CHARACTER LENGTH SEMANTICS (CLS) only applies to Unicode databases. The CLS conversion has a dependency on the init.ora parameter NLS_LENGTH_SEMANTICS. The init.ora parameter NLS_LENGTH_SEMANTICS=CHAR, must be enabled for PeopleSoft Enterprise Unicode databases prior to executing the conversion. If the database being converted is ANSI, then this setting is not necessary.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-11: Creating Oracle Audit Tables

This step runs PRECNVADT1A.SQL, which drops and re-creates some temporary tables required by the pre-conversion audit SQRs.

If the tables being dropped, CHECK_CONSTRAINTS, DUPLICATE_CONSTRAINTS, and DROP_CONSTRAINTS, don't exist, the execution of this script will generate the following error, which can safely be ignored:

```
ORA-00942: table or view does not exist
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-12: Auditing Duplicate Length Constraints

This step runs PRECNVADT1.SQR, which checks for duplicate length constraints. This condition can generally exist if the database was created using the Oracle Import utility and CONSTRAINTS=Y was enabled, which is the default setting. You will review the output in a later step.

Note. If this SQR needs to be rerun for any reason, you *must* run PRECNVADT1A.SQL before rerunning PRECNVADT1.SQR.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-13: Auditing Disabled Constraints

This step runs PRECNVADT2.SQR, which checks for 'not_validated' constraints. Although this condition should not exist in a production database, it may have occurred if data was imported with external utilities, such as SQL Loader. You will review the output in a later step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-14: Reviewing Oracle Settings

The data type conversion is only supported for Oracle 9i or later with PeopleTools 8.48 or later *and* an application release 9.0 or later. Do *not* perform the rest of this task if you do not meet the qualifications.

For Unicode databases, examine the log file from the step Auditing Duplicate Length Constraints. If there are any duplicate length constraints, those duplicate constraints must be dropped. Run the utility SQL script, *PS_HOME*\scripts\GENDROPDUPCONSTRAINTS.SQL, to generate the script DROPDUPCONSTRAINTS.SQL, containing an ALTER TABLE *TABLE_NAME* DROP CONSTRAINT for every duplicate constraint found. Run the DROPDUPCONSTRAINTS.SQL to resolve the duplicate length constraints.

For Unicode databases, examine the log file from the step Auditing Disabled Constraints. If there are any disabled or nonvalidated constraints, these constraints should be re-validated. Run the utility SQL script, *PS_HOME*\scripts\GENREVALIDATECONSTRAINTS.SQL to generate the script REVALIDATECONSTRAINTS.SQL, containing an ALTER TABLE *TABLE_NAME* ENABLE VALIDATE CONSTRAINT *CONSTRAINT_NAME* for every invalid constraint found. Run the REVALIDATECONSTRAINTS.SQL to enable the constraints.

For Unicode databases, examine the log file from the step Validating Oracle Database to determine if the values in the init.ora file are set properly. For Unicode databases, the NLS_LENGTH_SEMANTICS parameter needs to have a value of *CHAR*. This indicates that CHARACTER LENGTH SEMANTICS is enabled and the conversion can continue. If you need to enable Character Length Semantics, work with your DBA to modify the init.ora for the Target database's SID and set NLS_LENGTH_SEMANTICS to *CHAR*. Then stop and restart the database SID for the setting to take effect.

Note. The NLS_LENGTH_SEMANTICS parameter should be set to *CHAR only* at this point in the upgrade, and should not be set to *CHAR* earlier in the upgrade. If it is set at the time of database creation, the data type conversion scripts will fail with an ORA-30556 error due to the existence of functional indexes on the table.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-15: Generating Oracle Conversion Scripts

Work with your database administrator to set the following init.ora parameters for the Target database's system identifier (SID). Stop and restart the database SID for the following settings to take effect:

1. Set the following init.ora parameters:

```
db_block_size=8192
db_cache_size=325165824
db_file_multiblock_read_count=8
job_queue_processes=10
shared_pool_size=425829120
pga_aggregate_target=5871947670
parallel_max_servers=8
workarea_size_policy=AUTO
```

Note. If you are using Oracle 10g or higher, you may use the parameters SGA_TARGET=300M and SGA_MAX_SIZE=350M instead of SHARED_POOL_SIZE, DB_CACHE_SIZE, and DB_BLOCK_BUFFERS.

2. Pre-allocate the PSTEMP tablespace to at least 10 GB.

3. Pre-allocate the PSDEFAULT tablespace to at least 2 GB with 10-MB local uniform extents.

4. Ensure that you have at least six redo logs sized at 500 MB each.

The Oracle data types script generation program is a Java program that connects to an Oracle database. The prerequisites are Java and the Oracle JDBC Drivers. The Oracle JDBC drivers will automatically be picked up by the .bat file provided that the %ORACLE_HOME% environment variable is set. Check if the %ORACLE_HOME% environment variable is set, by typing the following at the workstation command prompt:

```
echo %ORACLE_HOME%;
```

This should return a path, for example:

```
c:\oracle\product\10.1.0\client_1;
```

If the %ORACLE_HOME% environment variable is not set, then set it in the command prompt window by typing the following at the workstation command prompt:

```
SET ORACLE_HOME=Oracle_Home_location
```

The Oracle data types script generation program is executed using the *PS_HOME*\utility \PSORADataTypesConversion.BAT file, which requires five input parameters:

- THREADS: The number of Java threads the conversion script generation spawns to generate the scripts. We recommend 10 threads for running this program on Windows.

- ACCESSID: The access ID for the database to be converted.

- ACCESSIDPW: The access password for the database to be converted.

- DBNAME: The database name.

- OUTPUTDIR: A directory path to redirect the generated conversion scripts to a user specified directory. This must be set to the Change Assistant output directory for your upgrade pass. Change Assistant will run the generated scripts later in the upgrade.

  Example:

  ```
  PS_HOME\utility\PSORADataTypesConversion.bat 10 SYSADM SYSADM MYDB c:\upgrade⇒
  \output\Change_Assistant_job_directory
  ```

  In the example command line above:

  THREADS = 10

  ACCESSID = SYSADM

  ACCESSIDPW = SYSADM

  DBNAME = MYDB

  OUTPUTDIR = c:\upgrade\output\Change_Assistant_job_directory

Open a command prompt window on the client workstation and execute the Oracle data types script generation program *PS_HOME*\utility\PSORADataTypesConversion.bat. The program will display and write a log (PsOraCnv.log) to the directory specified by the OUTPUTDIR parameter indicating the status of the conversion program. Review PsOraCnv.log and ensure that the conversion scripts were generated cleanly.

For ANSI databases, only LONGTOLOBALTER conversion scripts are generated. For Unicode databases, two sets of scripts are generated: LONGTOLOBALTER conversion scripts and CHARACTERLENGTHSEMANTICSALTER scripts.

After successfully running the conversion program, verify that the generated SQL scripts are located in the staging Change Assistant output directory for your upgrade pass. Later in the upgrade, Change Assistant will automatically run the SQL scripts later in the upgrade from the Change Assistant output directory for your upgrade pass.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-16: Running Long to LOB Script 1

This step runs LONGTOLOBALTER1.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle long to LOB conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-17: Running Long to LOB Script 2

This step runs LONGTOLOBALTER2.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle long to LOB conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-18: Running Long to LOB Script 3

This step runs LONGTOLOBALTER3.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle long to LOB conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-19: Running Long to LOB Script 4

This step runs LONGTOLOBALTER4.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle long to LOB conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-20: Running Long to LOB Script 5

This step runs LONGTOLOBALTER5.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle long to LOB conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-21: Running Long to LOB Script 6

This step runs LONGTOLOBALTER6.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle long to LOB conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-22: Running Long to LOB Script 7

This step runs LONGTOLOBALTER7.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle long to LOB conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-23: Running Long to LOB Script 8

This step runs LONGTOLOBALTER8.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle long to LOB conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-24: Auditing Long to LOB Conversion

This step runs L2LAUDIT.SQR to report on the output of the long to LOB conversion. You will review the report output in a later step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-25: Running Character Length Script 1

This step runs CHARACTERLENGTHSEMANTICSALTER1.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle character length semantics conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-26: Running Character Length Script 2

This step runs CHARACTERLENGTHSEMANTICSALTER2.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle character length semantics conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-27: Running Character Length Script 3

This step runs CHARACTERLENGTHSEMANTICSALTER3.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle character length semantics conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-28: Running Character Length Script 4

This step runs CHARACTERLENGTHSEMANTICSALTER4.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle character length semantics conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-29: Running Character Length Script 5

This step runs CHARACTERLENGTHSEMANTICSALTER5.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle character length semantics conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-30: Running Character Length Script 6

This step runs CHARACTERLENGTHSEMANTICSALTER6.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle character length semantics conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-31: Running Character Length Script 7

This step runs CHARACTERLENGTHSEMANTICSALTER7.SQL, which was generated using PSORADataTypesConversion.bat. The Oracle character length semantics conversion scripts are designed to run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-32: Running Character Length Script 8

This step runs CHARACTERLENGTHSEMANTICSALTER8.SQL, which was generated using
PSORADataTypesConversion.bat. The Oracle character length semantics conversion scripts are designed to
run concurrently to improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-33: Auditing Character Length Semantics

This step runs CLSAUDIT.SQR to report on the output of the character length semantics conversion. You will
review the report output in a later step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 2-20-34: Reviewing Conversion Reports

To review the conversion report for Microsoft, examine the log file from the step Running Microsoft
Conversion Report. It contains a list of unconverted columns on tables along with its old data type. Fields on
tables with no Application Designer definition will be included in this log. Any unresolved errors from the step
Running Microsoft Conversion will also be included. If you are using these tables, it is possible to update
them manually to use the new data types with a SQL query tool or with an ETL tool. Be very cautious when
changing a table, as this could result in data loss or affected functionality. Once any underlying problems
have been resolved, you may rerun all of the previous steps in this task to reconvert any remaining objects
listed by the audit report.

Note. During Move to Production passes for Microsoft, you must manually convert any remaining objects.
During Move to Production passes, the record definition differs from the database table structure, so do *not*
build the record with Application Designer.

To review the conversion reports for Oracle, examine the log files from running the LONGTOLOBALTER*.SQL scripts. If the database is Unicode, also examine the log files for the CHARACTERLENGTHSEMANTICS*.SQL scripts. Review the output from the step "Auditing Long to LOB Conversion." L2LAUDIT.SQR reports on any unconverted long raw columns. The table name, column name, and column data type are listed. For Unicode databases, review the output from the step "Auditing Character Length Semantics." CLSAUDIT.SQR reports on any unconverted character length columns (Unicode only). Correct any errors listed on the log files or conversion reports before proceeding with the upgrade. You can manually convert any tables listed in the audit, or resolve the errors that led to the unconverted columns and rerun the conversion.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server Oracle	All

Task 2-20-35: Updating Database Options

This step runs UPGDBOPTIONS_ENABLE.SQL. This script updates the database to indicate that the new data types are now enabled.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server Oracle	All

Task 2-21: Backing Up After PeopleTools Upgrade

Back up your Copy of Production database now. This enables you to restart your upgrade from this point, in case you experience any database integrity problems during the remaining tasks in the upgrade process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

CHAPTER 3

Run and Review Compare Reports

This chapter discusses:

- Understanding Compare Reports
- Preparing for Application Changes
- Renaming Tables
- Running New Release Compare Reports
- Reviewing New Release Compare Reports

Understanding Compare Reports

Now that your Copy of Production database is at the same PeopleTools release as your new release, you can compare the two databases to see the differences. In this chapter you run and review compare reports to make decisions regarding your upgrade. Be sure you have plenty of space to run these reports, as some can be rather large.

Task 3-1: Preparing for Application Changes

This section discusses:

- Exporting Project Definitions
- Importing Project Definitions
- Dropping Tables and Views
- Dropping Indexes

Task 3-1-1: Exporting Project Definitions

In this step, you export from your Demo database the definitions of projects that will be used later in this upgrade. You will import these definitions in the next step. The script for exporting the project definitions is:

```
DLUPX08E.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Both	All	All	All

Task 3-1-2: Importing Project Definitions

In this step, you import the project definitions into your Copy of Production database. These projects will be used later in this upgrade. The script for importing the project definitions is:

```
DLUPX08I.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 3-1-3: Dropping Tables and Views

This step drops tables, views, or both, on the Copy of Production database. Some tables and views need to be dropped from the database prior to compare, copy, or generation of DDL scripts. Some common reasons for this are the following:

- When a record was a view in a prior release and will be a table in the new release, the view must be dropped before the new tables are created.

- Records used as Application Engine state records for upgrade conversion code must exist on the database as an exact version of the record definition. You do not want these tables to be altered without deleting the obsolete columns. To make that happen, drop the table on the database at this point in the upgrade.

- Some records that have many fields and long row lengths will exceed database limitations if they are altered without deleting obsolete columns. If the table is considered a "temporary" table for batch processing, PeopleSoft assumes it will contain no relevant data at this point in the upgrade process. Dropping the table at this point in the upgrade will eliminate the row length problems that could occur later in the upgrade.

If for some reason any of these tables or views do not exist in your database and you receive SQL errors, you can ignore the errors. You can proceed with your upgrade. The script name for your upgrade path is:

```
DLCRD04.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 3-1-4: Dropping Indexes

This step drops indexes on tables that are changing key structure. The existence of these indexes may cause errors during the Run the Create Indexes Script step that you will perform later in the upgrade. If you do not have these indexes to drop, that is acceptable. You can just continue with the upgrade.

The script name for your upgrade path is:

    DLCRD15.SQL

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 UNIX/NT Oracle	All

Task 3-2: Renaming Tables

This section discusses:

- Understanding Renamed Tables
- Running the RNCRD11MSS Script
- Running the RNCRD11IFX Script
- Running the RNCRD11ORA Script
- Running the RNCRD11SYB Script
- Running the RNCRD11DB2 Script
- Running the RNCRD11DBX Script

Understanding Renamed Tables

These SQL scripts rename tables, at the database level, to temporary table names. They do not change the Record Definition. These temporary tables will be used in the data conversion programs in a later step.

Near the end of the upgrade tasks, you will run a DDDAUDIT report again. On the report, these temporary tables will be listed in the section listing: "SQL Table defined in the Database and not found in the Application Designer." Either at that point or later when you are comfortable with the results of the data conversion, you can drop these temporary tables.

In some database platforms, the related indexes and views must be dropped before the table can be renamed. Oracle has included drop statements for these objects that exist on the DMO version of the database. However, the list of related objects may be different in your environment because of customizations or applied product incidents. You may encounter errors in these scripts because of these differences—for example, the script tries to drop an index or view that you do not have, or it cannot rename the table because there are more related objects that need to be dropped. You can ignore these errors and proceed with the test pass. Simply modify these scripts to work for your database and you will not encounter these errors in your next test pass.

Task 3-2-1: Running the RNCRD11MSS Script

The RNCRD11MSS.SQL script renames tables on the Copy of Production database. This script is for SQL Server databases and runs in the initial and Move to Production passes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	MS SQL Server	All

Task 3-2-2: Running the RNCRD11IFX Script

The RNCRD11IFX.SQL script renames tables on the Copy of Production database. This script is for Informix databases and runs in the initial and Move to Production passes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Informix	All

Task 3-2-3: Running the RNCRD11ORA Script

The RNCRD11ORA.SQL script renames tables on the Copy of Production database. This script is for Oracle databases and runs in the initial and Move to Production passes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 3-2-4: Running the RNCRD11SYB Script

The RNCRD11SYB.SQL script renames tables on the Copy of Production database. This script is for Sybase databases and runs in the initial and Move to Production passes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Sybase	All

Task 3-2-5: Running the RNCRD11DB2 Script

The RNCRD11DB2.SQL script renames tables on the Copy of Production database. This script is for DB2 z/OS databases and runs in the initial and Move to Production passes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 3-2-6: Running the RNCRD11DBX Script

The RNCRD11DBX.SQL script renames tables on the Copy of Production database. This script is for DB2 UNIX/NT databases and runs in the initial and Move to Production passes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 UNIX/NT	All

Task 3-3: Running New Release Compare Reports

This section discusses:

- Understanding the New Release Compare

- Preserving Local Message Node

- Modifying New Release Compare Options

- Running New Release UPGCUST Compare

- Running New Release UPGCUSTIB Compare

- Resetting Take Action Flags in UPGCUST

- Running UPGCUSTIB Filter Script

Understanding the New Release Compare

In this task you will compare your customizations to the new release objects by running a project compare against the Demo database.

Task 3-3-1: Preserving Local Message Node

In this step add your Local Message Node to the UPGCUST project before the project compare between the Copy of Production and Demo database.

To add Local Message Node:

1. Run the following SQL in your Copy of Production database to identify your Local Message Node:

    SELECT MSGNODENAME FROM PSMSGNODEDEFN WHERE LOCALDEFAULTFLG = 'Y'

2. Open Application Designer from your Copy of Production database.

3. Open project UPGCUST.

4. Select Insert, Definitions Into Project.

5. Select Definition Type of Message Node.

6. Enter the Message Node name that was returned from the SQL you ran above.

7. Select the displayed Message Node.

8. Click Insert.

9. Save project UPGCUST.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 3-3-2: Modifying New Release Compare Options

For compare steps, PeopleSoft Change Assistant templates are delivered with the default reports filter turned on in the compare options. This limits the size of the reports and keeps them manageable. Before you start the compares, review the Change Assistant template step properties for each compare step in this task and modify the compare options based on your requirements.

If you decide not to modify the compare options, the objects are still compared. However, the results are only available online in Application Designer. They are not written to the compare reports. The compare reports are tools to help you review changed objects. However, based on the report filters you select, you may need to review the action flags for other objects in the compare project in Application Designer.

For example, you can modify the compare options so the report contains customized objects that are present in your Copy of Production database but absent from the Demo database. Alternatively, you can review these objects online, through Application Designer, after the compare.

To modify upgrade compare options:

1. Highlight the compare step you want to review and right-click.

2. Select Step Properties.

    The Step Properties dialog box appears.

3. Click Upgrade.

    The Compare and Report dialog box appears.

4. Click Options.

5. Select the Report Filter tab.

    The default options include your custom changes on the reports.

6. Change the default options as necessary and click OK.
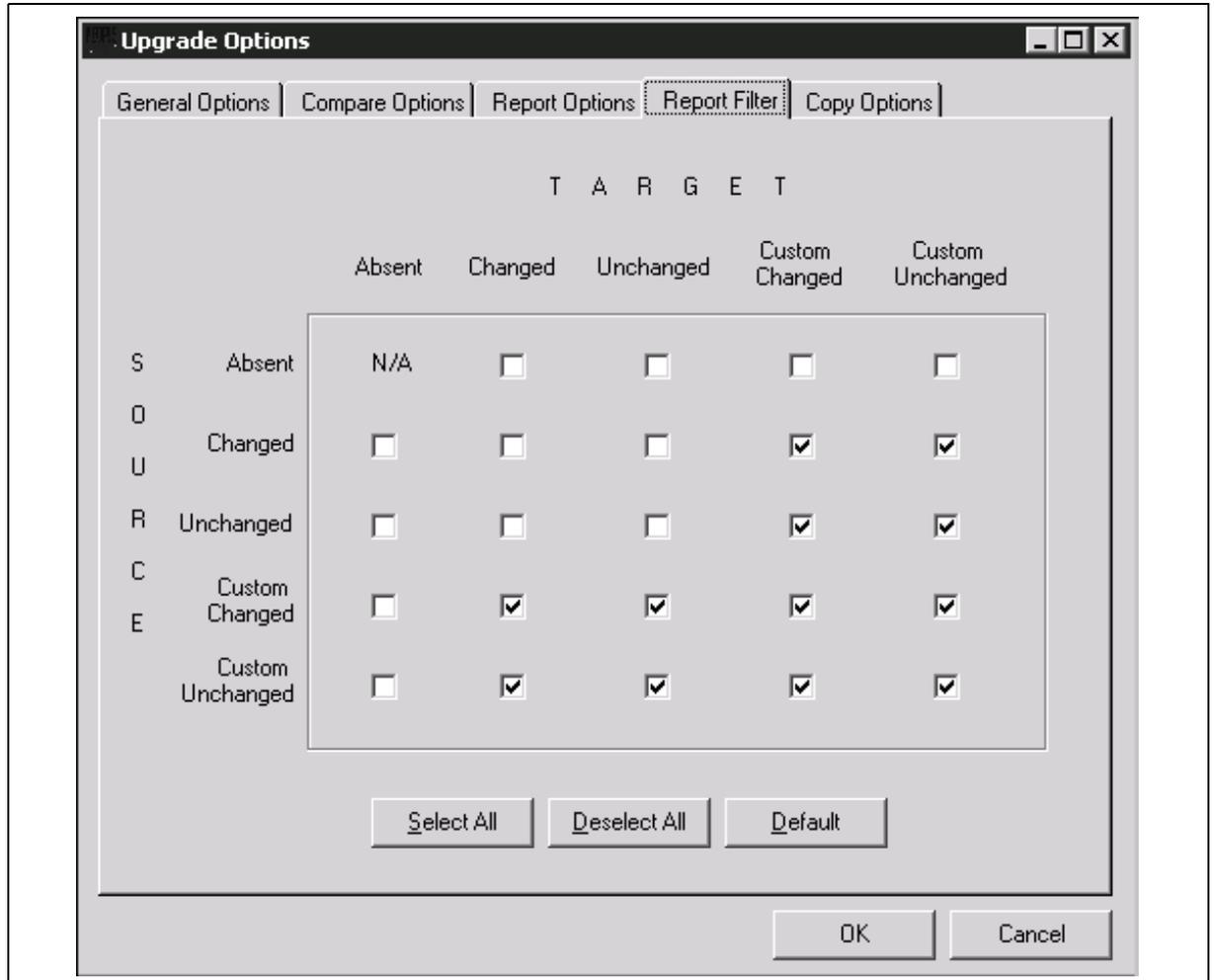
Upgrade Options page, Report Filter tab

7. In the Compare and Report dialog box, click OK.

8. In the Step Definitions dialog box, click OK.

9. Repeat steps 1 through 8 for each compare step in the task you want to review and change.

10. Select File, Save Job.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 3-3-3: Running New Release UPGCUST Compare

This step executes a project compare of all comparable objects in the UPGCUST project.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 3-3-4: Running New Release UPGCUSTIB Compare

This step executes a database compare of all Integration Broker objects and generates the UPGCUSTIB project.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 3-3-5: Resetting Take Action Flags in UPGCUST

This step turns *off* all Take Action flags in the UPGCUST project after the compare. You will analyze the compare results and adjust the upgrade flags in the next step.

The script for your upgrade is:

```
DLUPX98.DMS
```

See Appendix: "Using the Comparison Process."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 3-3-6: Running UPGCUSTIB Filter Script

This step removes all objects from the UPGCUSTIB project that are not marked *Changed* or *Unchanged* in your Copy of Production environment. It is used to isolate only custom objects in the UPGCUSTIB project.

The script name for your upgrade is:

```
DLUPX95.DMS
```

See Appendix: "Using the Comparison Process."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 3-4: Reviewing New Release Compare Reports

This section discusses:

- Reviewing New Release Changes

- Reviewing NonComparable Objects

Task 3-4-1: Reviewing New Release Changes

In this step, review the UPGCUST and UPGCUSTIB projects to evaluate how changes in the new release affect your customizations.

The UPGCUST and UPGCUSTIB projects exist in your Copy of Production database and contain all the objects you customized in the old release. These projects may include object definitions that are on your Copy of Production database but are not on the Copy of Current Demo database. If these are custom objects that you intend to keep in your upgraded system, you will want to ensure they are set to copy in the UPGCUST or UPGCUSTIB project. Compare reports are viewable when you open the projects in Application Designer. You can use these reports to determine your copy action for each object in the projects. Currently all Upgrade Flags are deselected, meaning no action will take place. Analyze the UPGCUST and UPGCUSTIB projects and select the Upgrade Flags for the customizations you wish to retain.

If the Target column has the value *Absent* it can indicate one of two possible conditions. If Oracle originally delivered the object definition, then it can be considered obsolete in the new release. This value can also indicate that you originally created the object definition for some custom functionality. To ensure the integrity and functionality of the system, delete obsolete Oracle-delivered objects. If you have made a customization to an obsolete object, refer to the product's Release Notes to assess the functionality of the customization and determine where to reapply it in the new release.

See Appendix: "Using the Comparison Process."

Warning! Pay close attention to the compare results for URLs, permission lists, and message nodes. It is highly likely that you will want to keep any customizations that you have made to these objects. You will want to migrate your customized local message node. Please be sure to select the Upgrade Flags from within Application Designer to retain these customizations.

Note. Steps in the database or third-party software installation documentation can result in Oracle-delivered objects being identified in the compare reports as *Changed* in the Source column. You should investigate all instances where objects are identified as *Changed* in the Source column to determine their origin and determine a plan of action based on the findings for each object.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 3-4-2: Reviewing NonComparable Objects

The UPGNONCOMP project is delivered in your Demo database. It contains object definitions that cannot be compared using Application Designer. The UPGNONCOMP project for your upgrade may contain some or all objects of the following object types: trees, access groups, roles, dimensions, cube definitions, and cube instance definitions. These object definitions are required for your upgraded database to function correctly. You need to review this project to see whether you customized any of the objects. You then need to reapply those customizations later in the upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

CHAPTER 4

Apply Application Changes

This chapter discusses:

- Understanding Application Changes
- Customizing the New Release
- Running New Release Upgrade Copy
- Updating Database Overrides
- Backing Up After the Upgrade Copy
- Modifying the Database Structure
- Loading Data for Data Conversion
- Restoring New Release Demo
- Applying Updates Before Data Conversion
- Configuring Scheduler and Server
- Backing Up Before Data Conversion
- Running Data Conversion
- Backing Up After Data Conversion
- Finalizing the Database Structure
- Running Data Conversion After Deletes
- Running Maintenance Pack Scripts
- Loading Data to Complete System Setup
- Updating Language Data
- Completing PeopleTools Conversion
- Updating Object Version Numbers
- Running the Final Audit Reports

Understanding Application Changes

Earlier in the upgrade, you made various application changes. Now it is time to apply these application changes to your Copy of Production database.

Task 4-1: Customizing the New Release

This section discusses:

- Understanding New Release Customizations
- Copying the UPGCUST Project
- Reviewing Copy Results

Understanding New Release Customizations

In this task, the UPGCUST project is copied from the Copy of Production database to the Demo database.

Note. If you are running Sybase, check the configuration parameter for open objects. If this parameter is set too low, you may encounter the following error: `ct_connect(): network packet layer: internal net library error during the compare or copy process`. If you encounter this error, you need to increase the value of this parameter accordingly.

Task 4-1-1: Copying the UPGCUST Project

This step copies your customized PeopleTools and application objects from the Copy of Production database to your Demo database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-1-2: Reviewing Copy Results

Review the results of the project copies that were performed in this task. For each of the projects copied, review the copy logs for any errors. Also, verify in Application Designer that each of the projects copied shows the Done options are checked for those objects you expected to be copied.

There are many different errors you can find in the copy logs, depending on which objects you chose to copy or not copy. For example, if you chose not to copy a record definition, but neglected to clear the PeopleCode Upgrade check box for that record, you will receive errors when trying to copy the PeopleCode. Application Designer maintains PeopleTools integrity during the copy and will not copy PeopleCode for records that do not exist.

Review any errors you receive during the copy process and determine whether they are acceptable cases or unacceptable errors that need correction. In the example above, either the PeopleCode error is acceptable because you do not intend to copy the record definition, or the error is unacceptable and you should copy the record and then copy the PeopleCode for that record again.

You may get messages similar to "Warning: FIELDNAME is a key field and has been appended to the end of the RECORDNAME record." This is an acceptable message and you can ignore it.

The following error occurs when copying a Portal Registry Structure that has a different PORTAL_OBJNAME but the same PORTAL_URLTEXT as an existing registry object.

```
Duplicate Key. Portal: portalname, Obj name: objectname, CP: nodename, URL (1st 50⇒
   char): URL
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-2: Running New Release Upgrade Copy

This section discusses:

- Exporting Selected PeopleTools Tables
- Importing Selected PeopleTools Tables
- Copying the UPGCUSTIB Project
- Swapping PeopleTools Tables
- Creating the UPGIBCOPY Project
- Copying the UPGIBCOPY Project
- Updating Target Values
- Copying the UPGNONCOMP Project
- Reviewing Project Copy Results
- Exporting New Release Objects
- Importing New Release Objects
- Resetting Object Version Numbers
- Backing Up New Release Demo Again

Task 4-2-1: Exporting Selected PeopleTools Tables

Depending on your upgrade path you will need to export one or more PeopleTools tables to preserve values on your Copy of Production database. This step exports PeopleTools tables in the Copy of Production before the upgrade copy has occurred.

The script for your upgrade path is:

```
DLUPX96E.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-2-2: Importing Selected PeopleTools Tables

Depending on your upgrade path you will need to import one or more PeopleTools tables to preserve values on your Copy of Production database. This step imports PeopleTools tables into the Demo database before the upgrade copy occurs.

The script for your upgrade path is:

```
DLUPX96I.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-2-3: Copying the UPGCUSTIB Project

This step copies your customized Integration Broker objects from the Copy of Production database to your Demo database.

See Customizing the New Release, Reviewing Copy Results.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-2-4: Swapping PeopleTools Tables

This step swaps the base language for tables that contain PeopleTools Managed Object data and related language data on your Demo database. This is in preparation for the step, "Exporting New Release Objects." This script should only be run if your Copy of Production has a base language other than English. The script name for your upgrade path is:

```
PT_RELEASE_SWAP.DMS
```

If you would like to automate this step, follow the procedure below.

To make this step automated:

1. Select the step Swapping PeopleTools Tables in Change Assistant.

2. Open the Step Properties dialog box.

3. Change the Type from *ManualStop* to *DataMoverUser*.

4. Click OK.

5. In your upgrade job, mark the step as Run.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	Non-English Base Language

Task 4-2-5: Creating the UPGIBCOPY Project

In this step, you create the UPGIBCOPY project and use it to upgrade your Integration Broker objects to the new release.

To create the UPGIBCOPY project:

1. Launch PeopleTools and sign on to the New Release Demo database.

2. From Application Designer, select File, New…

3. Select Project, and then click OK.

4. Select Insert, Definitions into Project…

5. Select *Messages* from the Object Type drop-down list box.

6. Click Insert, and then click Select All.

7. Click Insert.

8. Repeat steps 5, 6, and 7 for the following object types:

    • Services

    • Service Operations

    • Service Operation Handlers

    • Service Operating Versions

    • Service Operation Routings

    • IB Queues

9. Click Insert, and then click Close.

10. Select File, Save All.

11. Enter the project name UPGIBCOPY.

    Warning! You must name the project UPGIBCOPY or the next step will fail.

12. Click OK.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-2-6: Copying the UPGIBCOPY Project

In this step, copy all objects in the project, UPGIBCOPY. This project consists of Oracle-delivered Integration Broker objects as well as any customizations you may have selected to copy to the New Release Demo in a previous step.

See Copying the UPGCUSTIB Project.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-2-7: Updating Target Values

This step updates the Message Node table on the Demo database to keep the assignment of the Local Node defined in the Copy of Production. The update uses the copy of the Message Node table taken earlier in the upgrade.

The script for your upgrade path is:

```
DLUPX97.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-2-8: Copying the UPGNONCOMP Project

In this step, copy the non-compare project, UPGNONCOMP. This project consists of object types you cannot compare and object types not included in your compare project. In a previous step, you reviewed this Oracle-delivered project and modified the Upgrade check box for any objects you did not want to copy.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-2-9: Reviewing Project Copy Results

Review the results of the UPGCUSTIB, UPGIBCOPY, and UPGNONCOMP project copy steps that were performed earlier in this task. Review each copy log for any errors and verify in Application Designer that the Done options are checked for the objects in each of the projects. To verify Done options for UPGIBCOPY and UPGNONCOMP, you would log in to the Demo database, whereas to verify Done options for UPGCUSTIB, you would log in to your Copy of Production database.

There are many different errors you can find in the copy logs, depending on which objects you chose to copy or not copy. Review any errors you received during the copy process to determine whether they are acceptable cases or unacceptable errors that need corrective action.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-2-10: Exporting New Release Objects

This step exports the new release objects and your customizations that you copied to the Demo database in an earlier step, to a file.

The script name for your upgrade path is:

```
PT_RELEASE_EXPORT.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-2-11: Importing New Release Objects

This step imports the new release objects and your customizations into your Copy of Production database.

The script name for your upgrade path is:

```
PT_RELEASE_IMPORT.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-2-12: Resetting Object Version Numbers

In this step, you run the VERSION Application Engine program. This ensures that all of your version numbers are correct and, if not, resets them to 1.

Note. You will rerun the VERSION Application Engine program later in the upgrade. If you want to preserve the log files generated by Change Assistant from this run, you will need to manually rename the files after completing this step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-2-13: Backing Up New Release Demo Again

Back up your New Release Demo database now. This enables you to restart your upgrade from this point, should you experience any database integrity problems during the remainder of the tasks in the upgrade process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-3: Updating Database Overrides

This section discusses:

- Understanding Database Overrides
- Set Index Parameters After Copy
- Set Tablespace Names After Copy
- Set Record Parameters After Copy
- Create New Tablespaces

Understanding Database Overrides

In this task, you update PeopleSoft PeopleTools tables with DDL information from your physical database DDL. You may have overwritten information about where tables exist in your database during the copy project steps of this upgrade. The following steps synchronize your PeopleSoft PeopleTools table definitions with your database again.

Task 4-3-1: Set Index Parameters After Copy

This step updates index overrides stored in the PSIDXDDLPARM table. The values stored in the PARMVALUE field are updated with current values found in the system catalog. The name of the process is:

```
SETINDEX.SQR
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	Oracle DB2 z/OS	All

Task 4-3-2: Set Tablespace Names After Copy

This step updates tablespace names stored in the PSRECTBLSPC table. In addition, the values stored in the DDLSPACENAME field are updated with current values found in the system catalog. If you modified tablespace names from the Oracle-delivered names, this process makes those same changes in the PeopleSoft system record definition. It also corrects any tablespace names that were reset with values from the Demo database during the copy project step. The process then lists any tablespaces defined in the PeopleSoft PeopleTools tables that are not currently on your database. Use this report to create new tablespaces later in this task. The name of the process is:

```
SETSPACE.SQR
```

Note. This step updates both the database and tablespace names in the PSRECTBLSPC table for DB2 z/OS sites. The report produced by this process lists database/tablespace combinations that were not defined in the DB2 system catalog. The report may show your Demo database and tablespace names instead of your Copy of Production database and tablespace names. You will correct this situation when you create new tablespaces.

See Create New Tablespaces.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	Oracle Informix DB2 UNIX/NT DB2 z/OS	All

Task 4-3-3: Set Record Parameters After Copy

This step updates table overrides stored in the PSRECDDLPARM table. The values stored in the PARMVALUE field are updated with the current values found in the system catalog. The name of the process is:

```
SETTABLE.SQR
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	Oracle	All

Task 4-3-4: Create New Tablespaces

This section discusses:

• Prerequisites

• Creating Oracle Delivered Tablespaces

• Creating Custom Tablespaces

Prerequisites

Before you perform this step, you must make sure your database administrator has created all new tablespaces that will be used in new tables.

Note. DB2 z/OS sites need to create databases as well as tablespaces at this time.

Creating Oracle Delivered Tablespaces

If you use Oracle-delivered tablespace names, be aware that there may be new ones in this release. The report that you produced when you set tablespace names after copying provides a list of tablespaces that are missing from your database.

See Set Tablespace Names After Copy.

You need to create all the tablespaces on the report listed as missing on the database. Once you create all the tablespaces, you can rerun the SETSPACE.SQR; the report should show that no additional modifications are needed.

Note. For DBX sites, create all the tablespaces on the report listed as missing on the database in addition to the corresponding index (IDX) tablespace.

Oracle delivered a shell SQL script containing the DDL commands to create all the Oracle-delivered tablespaces. Edit the script to create just the new tablespaces and to set up the script for your environment.

Note. Oracle reassigned some tables to larger tablespaces because they now require a 32-KB buffer pool. You must manually edit the Create Table statements in the upgrade scripts to replace the tablespace names with an appropriate tablespace name in your implementation that utilizes a 32-KB buffer pool.

The script name is:

```
CRDDL.SQL (CRDDLU.SQL for DB2 z/OS Unicode)
```

Important! For DB2 UNIX/NT sites, the script name is CRDDLDMS.SQL for ANSI, and CRDDLDMSU.SQL for Unicode.

DB2 z/OS sites must also consider how database names are assigned. After the upgrade/copy is completed, some of the PeopleSoft PeopleTools metadata tables in your Copy of Production database will contain the database values from the Demo database. Review the SETSPACE SQR report for those tables that are reported as not defined in the database. If the report shows your Demo database names instead of your Copy of Production database names you can reset them with the following SQL:

```
UPDATE PSRECTBLSPC SET DBNAME = 'Copy of Production dbname'
WHERE DBNAME = 'Demo dbname'
```

Creating Custom Tablespaces

If you will use custom tablespaces, create those tablespaces now. Choose one of the following two methods to get the information into PeopleSoft PeopleTools:

- Update PeopleSoft PeopleTools for each record you will put into a custom tablespace. You can do this directly through Application Designer, or you can update PSRECTBLSPC directly by using the appropriate SQL for your site, as follows:

  DB2 z/OS sites:

```
UPDATE PSRECTBLSPC
SET DBNAME = 'new dbname', DDLSPACENAME = 'new tablespacename'
WHERE DBNAME = 'current dbname'
AND DDLSPACENAME = 'current tablespacename';
```

  All other sites:

```
UPDATE PSRECTBLSPC
SET DDLSPACENAME = 'new tablespacename'
WHERE DDLSPACENAME = 'current tablespacename';
```

  To update each table individually, add the following clause to the predicate of the above statement, making sure you use the record name in this clause:

```
AND RECNAME = record name
```

  The SETSPACE report contains the table name. The record name will not have the "PS_" prefix.

  You can double-check that you created all tablespaces by rerunning the SETSPACE.SQR report. If you created all tablespaces for records defined in PeopleSoft PeopleTools, the report will be empty.

- When you edit the Create and Alter scripts, you can change the SQL to create the tables in the correct tablespaces. Later in this task you will set tablespace names, which will update PeopleSoft PeopleTools with the correct tablespaces or database/tablespace in DB2 z/OS. The report should be empty at that time.

Note. For DB2 z/OS sites, the SETSPACE report may list some database/tablespace combinations as "Table Undefined - DB/TS OK" when in fact the database name is one that was defined for your Demo database. This occurs if your Demo and Copy of Production databases are in the same DB2 subsystem. The SETSPACE.SQR detected that the database/tablespace combinations do exist in the subsystem and are therefore valid. Make sure that you update these database/tablespace names to match those that exist in your Copy of Production, using the instructions above.

Note. During the Move to Production pass, you will create these tablespaces when you populate tablespace data. You can reuse this script, or you can create a new script for your production environment. To reuse the script you have created for this task, save it and copy it into the PS_HOME\SCRIPTS directory that you use during the Move to Production pass.

See the Enterprise PeopleTools installation guide for DB2 UDB for z/OS for your new release, "Creating a Database," Correcting Invalid Database/Tablespace Combinations.

See Modifying the Database Structure, Editing the Create and Alter Scripts.

See Modifying the Database Structure, Setting Tablespace Names.

See "Apply PeopleTools Changes," Populating Tablespace Data.

See "Apply Changes to Production Database," Performing the Move to Production.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	Oracle Informix DB2 z/OS DB2 UNIX/NT	All

Task 4-4: Backing Up After the Upgrade Copy

Back up your database now. This enables you to restart your upgrade from this point, should you experience any database integrity problems during the remaining tasks in the upgrade process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-5: Modifying the Database Structure

This section discusses:

* Understanding Modifying the Database Structure
* Backing Up for DB2
* Building the Upgrade Tables Script
* ReCreating Upgrade Tables
* Creating the ALLTEMPTABS Project
* Building the Create Temp Tables Script
* Creating the ALLTABS Project

- Building the Create and Alter Scripts
- Editing the Create and Alter Scripts
- Creating Temporary Tables
- Creating Tables
- Altering Tables
- Creating Indexes
- ReCreating Triggers
- Reviewing the Create Indexes Log
- Creating Upgrade Views
- Setting Index Parameters
- Setting Temp Table Tablespace Names
- Setting Tablespace Names
- Setting Record Parameters
- Generating a DB2 UNIX RUNSTATS Script
- Updating Statistics for DB2 UNIX
- Updating Statistics for DB2 zOS
- Updating Statistics for Informix
- Updating Statistics for Oracle

Understanding Modifying the Database Structure

In this task you create and run various scripts and processes that will modify your database structure, including creating new tables and indexes, altering tables that have changed, and re-creating modified indexes.

Note. In the Change Assistant job, some of the steps may complete without error, but display a Warning icon indicating that warning messages exist in the log file.

See the Enterprise PeopleTools PeopleBook: PeopleSoft Software Updates for your new release, "Error Handling."

Task 4-5-1: Backing Up for DB2

If you are using the DB2 z/OS platform, back up your database now. This enables you to restart your upgrade from this point if you should experience any database integrity problems during the remaining tasks in the upgrade process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	DB2 z/OS	All

Task 4-5-2: Building the Upgrade Tables Script

This step generates the SQL script to drop and re-create all the tables in the project named UPGCONVERT. These tables will be used during data conversion by Application Engine programs. They can be safely dropped at this time because they do not contain application data required by your PeopleSoft system.

The script name for your upgrade path is:

    UPGCONVERT_CRTTBL.SQL

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-3: ReCreating Upgrade Tables

This step runs the SQL script you generated to re-create all the tables in the project named UPGCONVERT.

The script name for your upgrade path is:

    UPGCONVERT_CRTTBL.SQL

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-4: Creating the ALLTEMPTABS Project

This step creates a project named ALLTEMPTABS and inserts all records of the type *Temporary Table*.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-5: Building the Create Temp Tables Script

This step generates the SQL script to drop and re-create all the records of type Temporary Table in the database. Processes use the Temporary Tables dynamically in your system. They can be safely dropped at this time because they do not contain transaction data required by your PeopleSoft system.

The script name for your upgrade path is:

    ALLTEMPTABS_CRTTBL.SQL

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-6: Creating the ALLTABS Project

This step creates a project named ALLTABS and inserts all records of the type *Table*.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-7: Building the Create and Alter Scripts

This step generates the SQL script to create all new records of the type *Table*. The script name is:

    ALLTABS_CRTTBL.SQL

This step generates the SQL script to alter all existing records of the type *Table*. This script is referred to as Alter Without Deletes. The tables are altered to add new columns, rename existing columns and change columns that have modified properties, such as length. Columns that will eventually be deleted will still exist on the tables after this script is executed. The script name is:

    ALLTABS_ALTTBL.SQL

This step also generates the SQL script to create new indexes and to re-create modified indexes as needed for the tables in the first two scripts. The script name is:

    ALLTABS_CRTIDX.SQL

Note. This step also creates the script ALLTABS_CRTTRG.SQL, which re-creates all database triggers. You do not need to run this script, because all database triggers will be created in the "Finalizing the Database Structure" task.

Note. For DB2 z/OS sites, if this step takes an exceptionally long time, performing a RUNSTATS on the system catalog tablespace SYSDBASE may improve performance.

See Finalizing the Database Structure.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-8: Editing the Create and Alter Scripts

In this step, you will edit the SQL create and alter scripts for tablespace names and sizing. The script names for your upgrade path are:

```
ALLTEMPTABS_CRTTBL.SQL
ALLTABS_CRTTBL.SQL
ALLTABS_ALTTBL.SQL
ALLTABS_CRTIDX.SQL
```

If you are not using the PeopleSoft tablespace names, you will need to review and modify the scripts above. When the new record was copied to the Copy of Production database, the PeopleSoft default tablespace name was copied as well. When you performed the step, "Create New Tablespaces," you were given the option to correct the tablespace names online or to wait and edit the scripts. After you have completed running these scripts you will run the programs that synchronize the PeopleTools definitions with the database catalog again. Therefore, any changes you make to the scripts now will be reflected in the PeopleTools definition. Have your database administrator review these scripts and modify the tablespace names appropriately.

Many of the new tables and indexes will be populated during the upgrade. If they are not sized appropriately for your database, the conversion programs will stop with errors. After the upgrade is complete, you may want your database administrator to review and make adjustments to the amount of free space left in some of the tables or tablespaces.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS DB2 UNIX/NT Oracle Informix	All

Task 4-5-9: Creating Temporary Tables

This step runs the SQL script you generated to create all the records of the type *Temporary Table*. The script name for your upgrade path is:

```
ALLTEMPTABS_CRTTBL.SQL
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-10: Creating Tables

This step runs the SQL script you generated to create all the records of the type *Table*. This step creates new table structures in your database. The script name for your upgrade path is:

    ALLTABS_CRTTBL.SQL

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-11: Altering Tables

This step runs the SQL script you generated to alter the existing records of type *Table*. This step alters existing PeopleSoft table structures to comply with your new PeopleSoft release.

The script name for your upgrade path is:

    ALLTABS_ALTTBL.SQL

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-12: Creating Indexes

This step runs the SQL script you generated to create indexes on records of the type *Table*. This step creates or modifies indexes as required.

The script name for your upgrade path is:

    ALLTABS_CRTIDX.SQL

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-13: ReCreating Triggers

This step executes the script CREATETRGR.DMS, which will re-create all PeopleSoft triggers in the database. The triggers on PeopleSoft tables were invalidated when the tables were altered and need to be re-created.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 4-5-14: Reviewing the Create Indexes Log

When Change Assistant runs the create indexes script to create indexes, it will not stop when it encounters errors. When you view the log file, you will see that some indexes cannot be created due to unique index constraints. The data causing those indexes to fail will be updated during the task, "Running Data Conversion." The indexes will then create successfully during the task, "Finalizing the Database Structure."

Review the errors in the log file. Unique constraint errors are acceptable. If you see any other types of index creation errors, such as space problems, you must correct them before you continue with the upgrade. If you do not correct the errors, it may degrade your performance during data conversion.

The log file name for your upgrade path is:

    ALLTABS_CRTIDX.LOG

See Running Data Conversion.

See Finalizing the Database Structure.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-15: Creating Upgrade Views

This step will create the views included in the project definition UPGVIEWS. These views are only needed for the manual setup tasks between here and running data conversion as well as data conversion itself.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-5-16: Setting Index Parameters

This step updates index overrides stored in the PSIDXDDLPARM table. The values stored in the PARMVALUE field are updated with current values found in the system catalog. The name of the process is:

```
SETINDEX.SQR
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle DB2 z/OS	All

Task 4-5-17: Setting Temp Table Tablespace Names

This step populates the PeopleTools table PSRECTBLSPC with the table name, database name, and tablespace name information for the temporary table instances created on the database in a previous step. This information will be required by processes that perform in-stream RUNSTATS (%UpdateStats) on the temporary table instances. The name of the process is:

```
SETTMPIN.SQR
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 4-5-18: Setting Tablespace Names

This step populates all tablespace information in the PSRECTBLSPC table. The values stored in the DDLSPACENAM field are updated with current values found in the system catalog. If you modified tablespace names when you edited the SQL script that created your new tables from the Oracle-delivered names, this will make those same changes in the PeopleSoft record definition. The name of the process is:

```
SETSPACE.SQR
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle Informix DB2 UNIX/NT DB2 z/OS	All

Task 4-5-19: Setting Record Parameters

This step updates table overrides stored in the PSRECDDLPARM table. The values stored in the PARMVALUE field are updated with the current values found in the system catalog. The name of the process is:

```
SETTABLE.SQR
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 4-5-20: Generating a DB2 UNIX RUNSTATS Script

This step executes the RUNSTATS.SQR that creates the RUNSTATS.SQL to update the statistics on DB2 UNIX/NT.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 UNIX/NT	All

Task 4-5-21: Updating Statistics for DB2 UNIX

Earlier in the upgrade process, you updated your statistics. Now that you have copied your new objects and created new indexes, update your statistics again. Run the RUNSTATS.SQL script created in the previous step to improve performance of your data conversions and generation of the Alter with Delete script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 UNIX/NT	All

Task 4-5-22: Updating Statistics for DB2 zOS

Earlier in the upgrade process, you updated your statistics. Now that you have copied your new objects and created new indexes, update your statistics again to improve performance of your data conversions and generation of the Alter with Delete script. Contact your database administrator to have the statistics updated on your database before proceeding with your upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS	All

Task 4-5-23: Updating Statistics for Informix

Earlier in the upgrade process, you updated your statistics. Now that you have copied your new objects and created new indexes, update your statistics again to improve performance of your data conversions and generation of the Alter with Delete script.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Informix	All

Task 4-5-24: Updating Statistics for Oracle

Earlier in the upgrade process, you updated your statistics. Now that you have copied your new objects and created new indexes, update your statistics again to improve performance of your data conversions and generation of the Alter with Delete script. Contact your database administrator to have the statistics updated on your database before proceeding with your upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

Task 4-6: Loading Data for Data Conversion

This section discusses:

- Swapping Languages on System Data
- Exporting Application Messages
- Importing Application Messages
- Exporting Record Groups
- Importing Record Groups
- Exporting the System Setup Data
- Importing the System Setup Data
- Exporting the PW Pagelet Data
- Importing the PW Pagelet Data
- Exporting the Pagelet Wizard Data
- Importing the Pagelet Wizard Data
- Exporting Upgrade Defaults
- Importing Upgrade Defaults
- Exporting System Data for Data Conversion
- Importing System Data for Data Conversion
- Exporting Data Conversion Driver Data

• Importing Data Conversion Driver Data

Task 4-6-1: Swapping Languages on System Data

This script swaps the base language for tables that contain system data on your Demo database and have related language data, in preparation for the system data exports in the next step. This script should be run only if your Copy of Production has a base language other than English. The script name for your upgrade path is:

```
DLCRLASWAP.DMS
```

If you want to make this step automated, follow the steps below.

To make this step automated:

1. Select the step Swapping Languages on System Data in Change Assistant.

2. Open the Step Properties dialog box.

3. Change the Type from *ManualStop* to *DataMoverUser*.

4. Click OK.

5. In your upgrade job, mark the step as Run.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	Non-English Base Language

Task 4-6-2: Exporting Application Messages

This step exports Application Messages data from the Demo database. The script name for your upgrade path is:

```
DLUPX01E.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-6-3: Importing Application Messages

This step imports Application Message data into your Copy of Production database. Message Sets 0-999 are overlaid during the PeopleTools Upgrade. Application Message Sets 1000-19,999 are overlaid with this task. If you have added custom messages in this set range, you must add those messages again at the end of the upgrade. To prevent this from happening again in future maintenance or upgrades, add your custom messages in a set range of 20,000 or greater.

Note. If the script fails, verify that your Configuration Manager Profile output and input directories are set to the same location. If not, this could be the cause of the problem.

The script name for your upgrade path is:

```
DLUPX01I.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-6-4: Exporting Record Groups

This step exports Record Group data from the Demo database. The script name for your upgrade path is:

```
DLUPX02E.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-6-5: Importing Record Groups

This step imports Record Group data and populates Set Control data in your Copy of Production database. The following records are related to Record Groups and Set Control data:

- REC_GROUP_REC
- REC_GROUP_TBL
- SET_CNTRL_TBL
- SET_CNTRL_GROUP
- SET_CNTRL_REC
- SETID_TBL

The import script deletes from, and then reloads, the Record Group tables, REC_GROUP_REC and REC_GROUP_TBL. These are the tables that are modified when you use PeopleTools, Utilities, Administration, Record Group. The script then rebuilds the related setID tables, PS_SET_CNTRL_GROUP and PS_SET_CNTRL_REC. The PS_SET_CNTRL_TBL and PS_SETID_TBL tables contain the setIDs you use in your system; this script does not update PS_SET_CNTRL_TBL. However, it does check for orphan setID references in PS_SET_CNTRL_REC and adds the missing setIDs to PS_SETID_TBL.

If you have moved an Oracle-delivered record into a custom added record group, and deleted the record from the Oracle-delivered record group, this script will put the record back into the Oracle-delivered record group and remove it from the custom added record group.

If you have created a new record group, it will be deleted in this step if all of its records are assigned to Oracle-delivered record groups in the new release. To continue using your custom record group, you will need to re-create it in the Reapply Customizations task.

This script creates an output file and uses it to create a temporary table. To run successfully, the Configuration Manager input and output Data Mover directories should be the same.

Note. If the script fails, verify that your Configuration Manager Profile output and input directories are set to the same location. If not, this could be the cause of the problem.

The script name for your upgrade path is:

    DLUPX02I.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-6-6: Exporting the System Setup Data

This script exports the contents of the Message, Strings, Stored Statements, Record Group, data conversion driver, EDI, and Mass Change tables from the Copy of Production database during your Move to Production passes. During the initial pass, you ran other scripts to load this data and in some cases had to reapply customizations. This script exports the entire contents of these tables, including customizations, so that you will not need to reapply them after the Move to Production. The script name for your upgrade path is:

    MVAPPEXP.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	MTP	All	All	All

Task 4-6-7: Importing the System Setup Data

This script imports the data exported in the previous step into your New Copy of Production database during your Move to Production passes. This script replaces many scripts that you ran in the initial pass. It will move all data in these tables so that any customizations you have added to these tables during your initial pass will be moved to your New Copy of Production database. Also, it will rebuild the Set Control tables using the Record Groups from the Copy of Production database and your current Set Control values on the New Copy of Production database. The script name for your upgrade path is:

    MVAPPIMP.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	All	All

Task 4-6-8: Exporting the PW Pagelet Data

This script exports the application-specific Pagelet Wizard pagelet definition, header, footer, and category tables from the Demo database in the initial pass. The script name is:

    DLUPX14E.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-6-9: Importing the PW Pagelet Data

This script imports the application-specific data for the Pagelet Wizard pagelet definition, header, footer, and category tables into your Copy of Production database during the initial pass. This data is needed for the data conversion. The script name is:

    DLUPX14I.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-6-10: Exporting the Pagelet Wizard Data

This script exports the contents of the Pagelet Wizard tables from the Copy of Production database during your Move to Production passes. During the initial pass, you ran programs and scripts to load this data and in some cases had to make changes. This script exports the entire contents of these tables, including changes, so that you will not need to reapply them after the Move to Production. This data is needed for the data conversion. The script name is:

    MVUPX16E.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	MTP	All	All	All

Task 4-6-11: Importing the Pagelet Wizard Data

This script imports the Pagelet Wizard tables from the Copy of Production database into the New Copy of Production during your Move to Production passes. This script replaces processes that you ran in the initial pass. It will move all data in the affected tables so that any changes you have made during your initial pass will be moved to your New Copy of Production database. This data is needed for the data conversion. The script name is:

```
MVUPX16I.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	All	All

Task 4-6-12: Exporting Upgrade Defaults

This script exports the upgrade default data values and mapping during your Move to Production passes. This is the data that you set up during the chapter "Prepare Your Database" of your initial upgrade pass. You will load this information into your New Copy of Production later in the Move to Production upgrade pass. The script name for your upgrade path is:

```
MVCRCEXP.DMS
```

See "Prepare Your Database."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	MTP	All	All	All

Task 4-6-13: Importing Upgrade Defaults

This script imports the upgrade default data values and mapping that you set up during the chapter "Prepare Your Database," of your initial upgrade pass. The script name for your upgrade path is:

```
MVCRCIMP.dms
```

See "Prepare Your Database."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	All	All

Task 4-6-14: Exporting System Data for Data Conversion

This script exports system data from your source database so that it can be imported into your target database.

The script name for your upgrade path is:

```
DLCRD12E.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Both	All	All	All

Task 4-6-15: Importing System Data for Data Conversion

This script imports the system data you exported in the previous step into your target database.

The script name for your upgrade path is:

    DLCRD12I.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-6-16: Exporting Data Conversion Driver Data

This step exports data conversion Application Engine driver data from the Demo database. The script name for your upgrade path is:

    DLUPX03E.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-6-17: Importing Data Conversion Driver Data

This step imports data conversion Application Engine driver data into your Copy of Production database.

The script name for your upgrade path is:

    DLUPX03I.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-7: Restoring New Release Demo

Restore your New Release Demo database from the backup you took in Chapter 1 earlier in the upgrade. The backup was taken before projects were copied and scripts were run against the Demo database. This is done to restore the environment to the original Demo database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-8: Applying Updates Before Data Conversion

You should have downloaded and applied Required For Upgrade updates just after you installed your Demo database. Now is a great time to check PeopleSoft Customer Connection again for any new postings, and apply them now. Before data conversion, you should also verify that you have the most current UPGCONVERT.EXE.

This is just one place that you can apply updates. There are other places in the upgrade process where applying updates may be applicable as well. How you apply the update varies depending on where you are in the upgrade.

See Appendix: "Applying Fixes Required for Upgrade."

Important! Apply all fixes listed under the product line/release, even if you have not licensed the product the fix is listed under. There are many interdependencies between products and database objects. If you do not apply the fix, you may be introducing another error in a different area of the conversion code.

To apply PeopleSoft project fixes before data conversion:

1. Download Required for Upgrade Change Packages using the "Download Change Package" functionality in Change Assistant.

2. Use Change Assistant to install and apply the updates into your Demo database for this upgrade pass. Review the documentation included with each update prior to applying the update.

    See the Enterprise PeopleTools PeopleBook: PeopleSoft Software Updates for your current release.

3. The project is now loaded on your Demo database. You should run a project compare to make sure the objects in the fix will not overwrite any of your customizations. If you find customizations, you must decide how to deal with them before you copy the fix to your Copy of Production.

4. If you are performing a Move to Production upgrade pass, first migrate the Change Packages into the Source database for this upgrade pass. If needed, first set up Change Assistant with the environment information for your Source database. If you customized any of the objects delivered in the Change Package, you should repackage the fix to include your customizations. If you did not customize any objects delivered in the fix you may directly apply it to the Source database.

    See the Enterprise PeopleTools PeopleBook: PeopleSoft Software Updates for your new release, "Applying Updates."

5.   Migrate the Change Packages into the Target database for this upgrade pass. If needed, first set up
     Change Assistant with the environment information for your Target database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-9: Configuring Scheduler and Server

You can manually run data conversion jobs on the server. Refer to the appendix "Improving Performance"
for instructions. If you choose to run data conversion manually, configure and start your process scheduler
and application servers now.

Tips for configuring and starting the application server:

• Make sure the application server domain being configured points to the Target database for this pass
  of the upgrade.

• Set a different JSL port for each database instance.

See the Enterprise PeopleTools installation guide for your database platform for the new release.

See Appendix: "Improving Performance."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-10: Backing Up Before Data Conversion

Back up your database now. This enables you to restart your upgrade from this point, should you experience
any database integrity problems during the remainder of the tasks in the upgrade process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11: Running Data Conversion

This section discusses:

- Reviewing Data Conversion Tips
- Running Data Conversion for Group 1
- Running Data Conversion for Group 2
- Running Data Conversion for Group 3
- Running Data Conversion for Group 4
- Running Data Conversion for Group 5
- Running Data Conversion for Group 6
- Running Data Conversion for Group 7
- Running Data Conversion for Group 8
- Running Data Conversion for Group 10
- Running Data Conversion for Group 13
- Running Data Conversion for Group 14
- Running Data Conversion for Group 15
- Running Data Conversion for Group 16

Note. In this task you will populate new tables and columns. Earlier, you altered tables and added all new and modified columns. You did not, however, remove obsolete columns. The following steps will move data from the obsolete columns to the new columns and tables. Later in this chapter, in the task "Finalizing the Database Structure," you will generate and run SQL to delete those obsolete columns. The Upgrade Driver Application Engine program, UPG_DATACONV, will run all upgrade data conversions.

Task 4-11-1: Reviewing Data Conversion Tips

This section discusses:

- Upgrade Driver Program − UPG_DATACONV
- Data Conversion Documentation
- Running Data Conversion Concurrently
- Writing Data Conversion for Your Non-Oracle Records
- Data Conversion Errors Expected During the Initial Upgrade Pass
- Restarting Data Conversion

Upgrade Driver Program − UPG_DATACONV

UPG_DATACONV is an Application Engine program designed to run all upgrade data conversions. Each time the program is run during an upgrade pass, Change Assistant passes a group number parameter to the program. The program then reads the table PS_UPG_DATACONV, selecting all rows with that group number and ordering them by the sequence number on the row. A list of Application Engine library sections that must be run for data conversion is returned. The program then calls each section in the order of the sequence number. You can review the sections that are called by the Upgrade Driver program by accessing the Define Upgrade Drivers page on the Demo database.

Data Conversion Documentation

Each section called by the Upgrade Driver program contains comments describing the underlying conversion. By running the UDATACNV.SQR report you can find which sections are called by the Upgrade Driver program and what they are doing.

See Appendix: "Using Data Conversion Utilities."

Running Data Conversion Concurrently

Each data conversion step in this task corresponds to a group number as defined in the Define Upgrade Drivers page. Each group is independent of the others unless otherwise documented, allowing the groups to be run concurrently. Oracle recommends that you run data conversion in the order it appears in your template during the initial upgrade pass to determine processing times. This is why the Change Assistant templates are delivered with the data conversion steps' "Run Concurrently" property set to *No*. To reduce overall processing time during your Move to Production passes, you may decide to run some or all conversion steps concurrently. To run steps concurrently, reset the "Run Concurrently" property to *Yes* in your Change Assistant template.

Note. Group 1 data conversion, run later in this task, includes the conversion for the Customer Data Model (CDM). It must run before any other groups, and may not be run concurrently with any other groups.

See the Enterprise PeopleTools PeopleBook: PeopleSoft Software Updates for your new release.

Writing Data Conversion for Your Non-Oracle Records

The data conversion code delivered for this upgrade was written to handle only Oracle-delivered records. You may have added your own records to the system. To convert data in the underlying tables, you may need to create your own Application Engine library. The Upgrade Driver program can call an Application Engine library section that you create. To have the Upgrade Driver program call your custom section during this task, you will need to add the section on the Define Upgrade Drivers page.

See Appendix: "Using Data Conversion Utilities."

Data Conversion Errors Expected During the Initial Upgrade Pass

During your initial upgrade pass you can expect to have data conversion programs fail. This is because your PeopleSoft software installation is unique, which makes it difficult to write data conversions that will work for everyone all of the time. Your database may be larger than most, you may have customized Oracle-defined records, or you may not have copied all object deletions onto your Copy of Production. These differences will cause data conversion to fail. You must fix each problem on your initial Copy of Production and restart the Application Engine program. Your fixes will be automatically copied to your New Copy of Production during the Move to Production passes and data conversion will run smoothly.

If you have customized records that are delivered from Oracle, you may need to make changes to the Application Engine programs to handle these customizations. For example, here are two situations in which you may need to customize data conversion code:

- If you added fields to a Oracle-delivered record, you may need to add your additional fields to the conversion code for those records.

- If a Oracle-delivered record you customized will be deleted, you may need to add your own conversions to move the data to a new location.

Use the Find In feature of Application Designer to determine which Application Engine programs affect your customized records.

To use the Find In feature:

1. Create a project and add all Application Engine programs and related objects that have a name starting with *UPG* and save the project.

2. Select Edit, Find In.

3. Enter each customized record name in the Find What field and your project name in the Project field.

4. Click Find.

    The results will appear in the output window.

Document any changes you make to data conversion programs. This way, if a new version of the program is delivered through Customer Connection, you will know exactly what changes you have made. You can then reapply the changes to the new version of the program.

If your database is large, you may have data conversion programs that fail due to running out of space as you move data from one table to another. This problem can happen on all RDBMS platforms, but is more of a problem on those platforms using tablespaces. If your data conversion terminates abnormally with a space error, examine the Application Engine SQL statements that caused the problem. Determine where the data is coming from and how much will be moved. Have your database administrator adjust the allocated space accordingly. The data conversion can then be restarted.

If you get a data conversion error because a field does not exist on a table, and the field is not one you have customized, check your field renames. If a field that appears on a record that is deleted in the new PeopleSoft release but was not deleted in your compare and copy, your table will be out of sync with what is expected by data conversion. If you had deleted the record, the rename would not happen on the physical table and the field would have the old name. This is what the data conversion program expects. If you did not delete the record, the field was renamed during the altering of tables and the data conversion program will terminate abnormally. Edit the Application Engine SQL to use the name, which is now on your table, and then restart the data conversion.

See Appendix: "Using the Comparison Process."

Restarting Data Conversion

Before restarting a data conversion step, rename the log file. Change Assistant uses the same log file name each time you start or restart an Application Engine program. This means that the restarted Application Engine program will replace the original log file if it is not renamed.

If your data conversion program fails, fix the problem on your Copy of Production and restart the program. When you set the data conversion step to Restart in your Change Assistant job, it will rerun the program using the PROCESS_INSTANCE and RUN_CNTL_ID from the initial run and the conversion will restart right after the last committed SQL command. Application Engine keeps track of data committed to the database in the table PS_AERUNCONTROL, keyed by PROCESS_INSTANCE and RUN_CNTL_ID.

See Finalizing the Database Structure.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-11-2: Running Data Conversion for Group 1

This step runs the UPG_DATACONV Application Engine program for Group 1. For additional documentation for Group 1, run the UDATACNV report.

This group includes the conversion for the Customer Data Model (CDM). It must run before any other groups, and may not be run concurrently with any other groups.

Group 1 must execute successfully before any other groups (if applicable) can run. If there are other groups and you decide to run groups concurrently, Group 1 must complete before you launch any other groups.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-3: Running Data Conversion for Group 2

This step runs the UPG_DATACONV Application Engine program for Group 2. If you want to see additional documentation for Group 2, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-4: Running Data Conversion for Group 3

This step runs the UPG_DATACONV Application Engine program for Group 3. If you want to see additional documentation for Group 3, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-5: Running Data Conversion for Group 4

This step runs the UPG_DATACONV Application Engine program for Group 4. If you want to see additional documentation for Group 4, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-6: Running Data Conversion for Group 5

This step runs the UPG_DATACONV Application Engine program for Group 5. If you want to see additional documentation for Group 5 then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-7: Running Data Conversion for Group 6

This step runs the UPG_DATACONV Application Engine program for Group 6. If you want to see additional documentation for Group 6, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-8: Running Data Conversion for Group 7

This step runs the UPG_DATACONV Application Engine program for Group 7. If you want to see additional documentation for Group 7, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-9: Running Data Conversion for Group 8

This step runs the UPG_DATACONV Application Engine program for Group 8. If you want to see additional documentation for Group 8, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-10: Running Data Conversion for Group 10

This step runs the UPG_DATACONV Application Engine program for Group 10. If you want to see additional documentation for Group 10, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-11: Running Data Conversion for Group 13

This step runs the UPG_DATACONV Application Engine program for Group 13. If you want to see additional documentation for Group 13, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-12: Running Data Conversion for Group 14

This step runs the UPG_DATACONV Application Engine program for Group 14. If you want to see additional documentation for Group 14, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-13: Running Data Conversion for Group 15

This step runs the UPG_DATACONV Application Engine program for Group 15. If you want to see additional documentation for Group 15, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-11-14: Running Data Conversion for Group 16

This step runs the UPG_DATACONV Application Engine program for Group 16. If you want to see additional documentation for Group 16, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-12: Backing Up After Data Conversion

Back up your database now. This enables you to restart your upgrade from this point, should you experience any database integrity problems during the remaining tasks in the upgrade process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-13: Finalizing the Database Structure

This section discusses:

- Understanding Final Database Structure
- Building the Alter with Deletes Scripts
- Altering Tables with Deletes
- Creating Indexes Again
- Creating Triggers
- Running the AE SYNCIDGEN Process
- Creating All Views

Understanding Final Database Structure

Now that Data Conversion is completed, this task will alter the tables to remove obsolete columns, and create final indexes and views.

Task 4-13-1: Building the Alter with Deletes Scripts

This step uses the previously created project ALLTABS and generates three SQL scripts: one that will alter tables to drop obsolete columns, one that will also create any remaining indexes that could not be created with the first alter, and one that will create triggers. The script names are:

```
ALLTABS_DEL_ALTTBL.SQL
ALLTABS_DEL_CRTIDX.SQL
ALLTABS_DEL_CRTTRG.SQL
```

Important! All indexes should create when the ALLTABS_DEL_CRTIDX.SQL script is run. When a unique index fails to create, it is probably due to a data conversion issue. If a unique index fails to create, you must resolve the issue and not simply remove the index. To prevent this issue, you can back up tables in the ALLTABS_DEL_ALTTBL.SQL script that will be dropping recfields that have data. This way, if you have an issue you may have the old fields and data you need to correct it.

Note. For DB2 z/OS sites, if this step takes an exceptionally long time, performing a RUNSTATS on the system catalog tablespace SYSDBASE may improve performance.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-13-2: Altering Tables with Deletes

This step executes the script ALLTABS_DEL_ALTTBL.SQL, which was generated in the previous step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-13-3: Creating Indexes Again

This step executes the script ALLTABS_DEL_CRTIDX.SQL, which was generated in the previous step. All indexes should create at this time.

Important! Review the log to find any unique indexes that might have failed to create. All indexes should create at this time, so those errors are not acceptable and should be corrected. When a unique index fails to create, it is probably due to a data conversion issue.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-13-4: Creating Triggers

This step executes the script ALLTABS_DEL_CRTTRG.SQL, which was generated in a previous step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-13-5: Running the AE SYNCIDGEN Process

This step executes the AE_SYNCIDGEN Application Engine program. Mobile applications use Sync IDs to give each row a unique identifier. For any tables with the Sync ID column set to the default value of zero, the AE_SYNCIDGEN program will populate the column with the next valid Sync ID value.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-13-6: Creating All Views

This step runs CREATEVW.DMS to re-create all views in the Copy of Production database. The script will try to create every view in Application Designer. If there is an error on one view, it will keep going until it gets to the end of the list.

Important! Review the log to find any views that failed to create. All views should create at this time, so those errors are not acceptable and should be corrected.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-14: Running Data Conversion After Deletes

Task 4-14-1: Running Data Conversion for Group 20

This step runs the UPG_DATACONV Application Engine program, which runs data conversion for Group 20. If you want to see additional documentation for Group 20, then run the UDATACNV report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15: Running Maintenance Pack Scripts

This section discusses:

- Understanding Running Maintenance Pack Scripts
- Running the MPUPY67596102 Script
- Running the MPUPY67596103 Script
- Running the MPUPY67596105 Script
- Running the MPUPY68582003 Script
- Running the MPUPY68582006 Script
- Running the MPUPY68582007 Script
- Running the MPUPY68582008 Script
- Running the MPUPY69399801 Script
- Running the MPUPY69399802 Script
- Running the MPUPY69399803 Script
- Running the MPUPY69399804 Script
- Running the MPUPY69399805 Script
- Running the MPUPY69399806 Script
- Running the MPUPY69399807 Script
- Running the MPUPY69449301 Script
- Running the MPUPY69633501 Script
- Running the MPUPY69633502 Script
- Running the MPUPY69876001 Script
- Running the MPUPY70276501 Script

- Running the MPUPY70276502 Script
- Running the MPUPY70276503 Script
- Running the MPUPY70276504 Script
- Running the MPUPY70276505 Script
- Running the MPUPY70276506 Script
- Running the MPUPY70276507 Script
- Running the MPUPY70276508 Script
- Running the MPUPY70276509 Script
- Running the MPUPY70276510 Script
- Running the MPUPY70276511 Script
- Running the MPUPY70276512 Script
- Running the MPUPY70276513 Script
- Running the MPUPY71162301 Script
- Running the MPUPY71162304 Script
- Running the MPUPY71937601 Script
- Running the MPUPY71937602 Script
- Running the MPUPY71937604 Script
- Running the MPUPY71937605 Script
- Running the MPUPY72320601 Script
- Running the MPUPY72405601 Script
- Running the MPUPY72405602 Script
- Running the MPUPY72405603 Script
- Running the MPUPY72432501 Script
- Running the MPUPY72651801 Script
- Running the MPUPY72717901 Script
- Running the MPUPY72835301 Script
- Running the MPUPY72947301 Script
- Running the MPUPY72947302 Script
- Running the MPUPY72947303 Script
- Running the MPUPY72947304 Script
- Running the MPUPY72947305 Script
- Running the MPUPY72947306 Script
- Running the MPUPY72947307 Script
- Running the MPUPY72947308 Script

- Running the MPUPY72947309 Script
- Running the MPUPY73046701 Script
- Running the MPUPY73046702 Script
- Running the MPUPY73106901 Script
- Running the MPUPY73551901 Script
- Running the MPUPY73573301 Script
- Running the MPUPY73573302 Script
- Running the MPUPY73573304 Script
- Running the MPUPY73573305 Script
- Running the MPUPY73573306 Script
- Running the MPUPY73573307 Script
- Running the MPUPY73573308 Script
- Running the MPUPY73573309 Script
- Running the MPUPY74090301 Script
- Running the MPUPY74325101 Script
- Running the MPUPY74325102 Script
- Running the MPUPY74445901 Script
- Running the MPUPY75324201 Script
- Running the MPUPY75336201 Script
- Running the MPUPY75358901 Script
- Running the MPUPYCRM900MAINTLOG5 Script

Understanding Running Maintenance Pack Scripts

This task runs the scripts required for maintenance pack updates. Make sure that all .dat files that were delivered as part of Maintenance Pack 5 are present in the <pshome>\data directory that is being used for the upgrade pass.

Task 4-15-1: Running the MPUPY67596102 Script

This step runs the MPUPY675961_02.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-2: Running the MPUPY67596103 Script

This step runs the MPUPY675961_03.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-3: Running the MPUPY67596105 Script

This step runs the MPUPY675961_05.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-4: Running the MPUPY68582003 Script

This step runs the MPUPY685820_03.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-5: Running the MPUPY68582006 Script

This step runs the MPUPY685820_06.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-6: Running the MPUPY68582007 Script

This step runs the MPUPY685820_07.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-7: Running the MPUPY68582008 Script

This step runs the MPUPY685820_08.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-8: Running the MPUPY69399801 Script

This step runs the MPUPY693998_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-9: Running the MPUPY69399802 Script

This step runs the MPUPY693998_02.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-10: Running the MPUPY69399803 Script

This step runs the MPUPY693998_03.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-11: Running the MPUPY69399804 Script

This step runs the MPUPY693998_04.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-12: Running the MPUPY69399805 Script

This step runs the MPUPY693998_05.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-13: Running the MPUPY69399806 Script

This step runs the MPUPY693998_06.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-14: Running the MPUPY69399807 Script

This step runs the MPUPY693998_07.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-15: Running the MPUPY69449301 Script

This step runs the MPUPY694493_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-16: Running the MPUPY69633501 Script

This step runs the MPUPY696335_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-17: Running the MPUPY69633502 Script

This step runs the MPUPY696335_02.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-18: Running the MPUPY69876001 Script

This step runs the MPUPY698760_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-19: Running the MPUPY70276501 Script

This step runs the MPUPY702765_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-20: Running the MPUPY70276502 Script

This step runs the MPUPY702765_02.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-21: Running the MPUPY70276503 Script

This step runs the MPUPY702765_03.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-22: Running the MPUPY70276504 Script

This step runs the MPUPY702765_04.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-23: Running the MPUPY70276505 Script

This step runs the MPUPY702765_05.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-24: Running the MPUPY70276506 Script

This step runs the MPUPY702765_06.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-25: Running the MPUPY70276507 Script

This step runs the MPUPY702765_07.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-26: Running the MPUPY70276508 Script

This step runs the MPUPY702765_08.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-27: Running the MPUPY70276509 Script

This step runs the MPUPY702765_09.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-28: Running the MPUPY70276510 Script

This step runs the MPUPY702765_10.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-29: Running the MPUPY70276511 Script

This step runs the MPUPY702765_11.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-30: Running the MPUPY70276512 Script

This step runs the MPUPY702765_12.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-31: Running the MPUPY70276513 Script

This step runs the MPUPY702765_13.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-32: Running the MPUPY71162301 Script

This step runs the MPUPY711623_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-33: Running the MPUPY71162304 Script

This step runs the MPUPY711623_04.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-34: Running the MPUPY71937601 Script

This step runs the MPUPY719376_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-35: Running the MPUPY71937602 Script

This step runs the MPUPY719376_02.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-36: Running the MPUPY71937604 Script

This step runs the MPUPY719376_04.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-37: Running the MPUPY71937605 Script

This step runs the MPUPY719376_05.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-38: Running the MPUPY72320601 Script

This step runs the MPUPY723206_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-39: Running the MPUPY72405601 Script

This step runs the MPUPY724056_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-40: Running the MPUPY72405602 Script

This step runs the MPUPY724056_02.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-41: Running the MPUPY72405603 Script

This step runs the MPUPY724056_03.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-42: Running the MPUPY72432501 Script

This step runs the MPUPY724325_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-43: Running the MPUPY72651801 Script

This step runs the MPUPY726518_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-44: Running the MPUPY72717901 Script

This step runs the MPUPY727179_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-45: Running the MPUPY72835301 Script

This step runs the MPUPY728353_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-46: Running the MPUPY72947301 Script

This step runs the MPUPY729473_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-47: Running the MPUPY72947302 Script

This step runs the MPUPY729473_02.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-48: Running the MPUPY72947303 Script

This step runs the MPUPY729473_03.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-49: Running the MPUPY72947304 Script

This step runs the MPUPY729473_04.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-50: Running the MPUPY72947305 Script

This step runs the MPUPY729473_05.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-51: Running the MPUPY72947306 Script

This step runs the MPUPY729473_06.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-52: Running the MPUPY72947307 Script

This step runs the MPUPY729473_07.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-53: Running the MPUPY72947308 Script

This step runs the MPUPY729473_08.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-54: Running the MPUPY72947309 Script

This step runs the MPUPY729473_09.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-55: Running the MPUPY73046701 Script

This step runs the MPUPY730467_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-56: Running the MPUPY73046702 Script

This step runs the MPUPY730467_02.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-57: Running the MPUPY73106901 Script

This step runs the MPUPY731069_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-58: Running the MPUPY73551901 Script

This step runs the MPUPY735519_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-59: Running the MPUPY73573301 Script

This step runs the MPUPY735733_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-60: Running the MPUPY73573302 Script

This step runs the MPUPY735733_02.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-61: Running the MPUPY73573304 Script

This step runs the MPUPY735733_04.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-62: Running the MPUPY73573305 Script

This step runs the MPUPY735733_05.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-63: Running the MPUPY73573306 Script

This step runs the MPUPY735733_06.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-64: Running the MPUPY73573307 Script

This step runs the MPUPY735733_07.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-65: Running the MPUPY73573308 Script

This step runs the MPUPY735733_08.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-66: Running the MPUPY73573309 Script

This step runs the MPUPY735733_09.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-67: Running the MPUPY74090301 Script

This step runs the MPUPY740903_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-68: Running the MPUPY74325101 Script

This step runs the MPUPY743251_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-69: Running the MPUPY74325102 Script

This step runs the MPUPY743251_02.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-70: Running the MPUPY74445901 Script

This step runs the MPUPY744459_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-71: Running the MPUPY75324201 Script

This step runs the MPUPY753242_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-72: Running the MPUPY75336201 Script

This step runs the MPUPY753362_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-73: Running the MPUPY75358901 Script

This step runs the MPUPY753589_01.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-15-74: Running the MPUPYCRM900MAINTLOG5 Script

This step runs the MPUPYCRM900MAINTLOG5.DMS script to update the database with Maintenance Pack 5 data.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-16: Loading Data to Complete System Setup

This section discusses:

- Exporting Strings
- Importing Strings
- Exporting XML Service Information
- Importing XML Service Information
- Exporting Related Language System Data
- Importing Related Language System Data
- Exporting Application System Data
- Importing Application System Data
- Updating STYLESHEETNAME
- Exporting Active Analytics Framework Data
- Importing Active Analytics Framework Data
- Exporting Order Capture Personalizations
- Importing Order Capture Personalizations
- Exporting Common Portal System Options
- Importing Common Portal System Options
- Exporting Setup Data
- Importing Setup Data

Task 4-16-1: Exporting Strings

This script exports Strings data from the Demo database. The script name for your upgrade path is:

```
DLUPX04E.DMS
```

This data will be exported during Move to Production by the script MVAPPEXP.DMS.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-16-2: Importing Strings

This script imports Strings data into the Copy of Production database. The script name for your upgrade path is:

    DLUPX04I.DMS

This data will be imported during Move to Production by the script MVAPPIMP.DMS.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-16-3: Exporting XML Service Information

This script exports XML service data from the Demo database. The script name for your upgrade path is:

    DLUPX13E.DMS

This data will be exported during Move to Production by the script MVPRDEXP.DMS.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-16-4: Importing XML Service Information

This script imports XML service data into the Copy of Production database. The script name for your upgrade path is:

    DLUPX13I.DMS

This data will be imported during Move to Production by the script MVPRDIMP.DMS.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-16-5: Exporting Related Language System Data

This script exports system data from various application-related language tables in your Demo database into a Data Mover *.DAT file. In a later step, this data will be loaded into your Copy of Production. The script name for your upgrade path is:

    DLCRLASYSE.DMS

Note. During Move to Production passes you can reuse the data files that are created by this export script. Preserve this DAT file, and set the Type of Upgrade property in the Change Assistant template to Initial Upgrade for this step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Both	All	All	All Non-English

Task 4-16-6: Importing Related Language System Data

This script will delete old related language system data from related language tables. The script then imports the data exported by the scripts above. The script name for your upgrade path is:

    DLCRLASYSI.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All Non-English

Task 4-16-7: Exporting Application System Data

This script exports system data from various application tables from the Demo database into a Data Mover *.DAT file. In a later step, this data will be loaded into the Copy of Production database. The script name for your upgrade path is:

    DLCRSYSE.DMS

Note. During Move to Production passes, you can reuse the data files that are created by this export script. To do this, change the Type of Upgrade from Both to Initial Upgrade in the step properties and save the job.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Both	All	All	All

Task 4-16-8: Importing Application System Data

This script imports the application system data, exported in the previous step, into the Copy of Production database. The script name for your upgrade path is:

    DLCRSYSI.DMS

Note. Some of the data will be imported using the *ignore dups* option. These data loads will give the message "Error: duplicate SQL rows" and then give a "Successful completion" message. These error messages can be ignored because duplicate data is expected.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-16-9: Updating STYLESHEETNAME

This step updates the STYLESHEETNAME field in the PSOPTIONS table.

Note. If you defined your own styles, you can choose to change those styles for your stylesheet name at the end of the upgrade.

The script name for your upgrade path is:

    DLCRX25.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-16-10: Exporting Active Analytics Framework Data

This step exports the active analytics framework system data from the Demo database. The script name for your upgrade path is:

    DLCRX23E.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Both	All	All	All

Task 4-16-11: Importing Active Analytics Framework Data

This step imports the active analytics framework system data, exported in the previous step, into the Copy of Production database.

The script name for your upgrade path is:

    DLCRX23I.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-16-12: Exporting Order Capture Personalizations

This step exports order capture personalizations from the Source database. The script name for your upgrade path is:

    DLROX01E.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Both	Order Capture	All	All

Task 4-16-13: Importing Order Capture Personalizations

This step imports order capture personalizations into your Copy of Production database. The script name for your upgrade path is:

    DLROX01I.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Order Capture	All	All

Task 4-16-14: Exporting Common Portal System Options

This script exports the contents of the Common Portal System Options table from the Demo database. The script name for your upgrade path is:

    DLEOX01E.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Both	All	All	All

Task 4-16-15: Importing Common Portal System Options

This script imports the Common Portal System Options data into your Copy of Production database. The script name for your upgrade path is:

    DLEOX01I.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-16-16: Exporting Setup Data

This script exports setup data from the Demo database. The script name for your upgrade path is:

    DLUPX16E.DMS

This data will be exported during Move to Production by the script MVAPPEXP.DMS.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	All	All	All

Task 4-16-17: Importing Setup Data

This script imports setup data into the Copy of Production database. The script name for your upgrade path is:

    DLUPX16I.DMS

This data will be imported during Move to Production by the script MVAPPIMP.DMS.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-17: Updating Language Data

This section discusses:

- Understanding Updating Language Data

- Run the TSRECPOP Script

Understanding Updating Language Data

In this task, you run scripts to modify data in PeopleSoft PeopleTools-related language tables.

Note. For DB2 z/OS customers, Oracle recommends that you run RUNSTATS against the system catalog tables at this time.

Task 4-17-1: Run the TSRECPOP Script

In this step, the TSRECPOP script initializes and modifies the data in PeopleSoft PeopleTools-related language architecture tables.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 4-18: Completing PeopleTools Conversion

The PeopleTools Upgrade Driver Application Engine program, PTUPGCONVERT, runs additional PeopleTools upgrade data conversions. The program then reads the table PS_PTUPGCONVERT, selecting all rows with a group number of 02 and ordering them by the sequence number on the row. A list of Application Engine library sections that must be run for data conversion is returned. The program then calls each section in the order of the sequence number. Review the report generated by PTUCONV.SQR for details on the conversions run in this step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-19: Updating Object Version Numbers

In this task, you run the VERSION Application Engine program. This ensures that all of your version numbers are correct and, if not, resets them to 1.

Note. Do not update statistics after you complete this task.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-20: Running the Final Audit Reports

This section discusses:

- Run the Final DDDAUDIT Report
- Run the Final SYSAUDIT Report
- Create the FNLALTAUD Project
- Run the Final Alter Audit
- Review the Final Audits
- Run a Final SETINDEX Report
- Run a Final SETTABLE Report

Task 4-20-1: Run the Final DDDAUDIT Report

DDDAUDIT is an SQR that compares your production SQL data tables with the PeopleSoft PeopleTools record definitions to uncover inconsistencies. You can expect some errors from this report. You will review the output from the report in another step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-20-2: Run the Final SYSAUDIT Report

SYSAUDIT is an SQR that identifies *orphaned* PeopleSoft objects. For example, SYSAUDIT will identify a module of PeopleCode that exists but does not relate to any other objects in the system. SYSAUDIT also identifies other inconsistencies within your database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-20-3: Create the FNLALTAUD Project

In this step, you create the FNLALTAUD project and use it to run your final Alter Audit. Creating this new project now ensures that all the records in your system are audited, including SQL tables. This project also includes any custom records that you have created in your system.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-20-4: Run the Final Alter Audit

Run the PeopleSoft PeopleTools alter record process on all tables in your system to check whether the PeopleSoft PeopleTools definitions are synchronized with the underlying SQL data tables in your database. This process is called an Alter Audit. An Alter Audit compares the data structures of your database tables with the PeopleSoft PeopleTools definitions to uncover inconsistencies. The Alter Audit then creates an SQL script with the DDL changes needed to synchronize your database with the PeopleSoft PeopleTools definitions.

The Alter Audit script is built using the FNLALTAUD project created in the previous step.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-20-5: Review the Final Audits

The Alter Audit process creates SQL scripts that correct any discrepancies between your PeopleSoft PeopleTools record definitions and the database system catalog table definitions. Review the Alter Audit output and correct any discrepancies noted by running the generated scripts with your platform-specific SQL tool. The script names are:

```
FNLALTAUD_ALTTBL.SQL
FNLALTAUD_CRTIDX.SQL
```

Note. The Alter Audit process also creates the script FNLALTAUD_CRTTRG.SQL, which re-creates all database triggers. You do not need to run this script, since all database triggers were created in a previous task.

See Finalizing the Database Structure.

Note. For Informix sites, if your database has Application Functions, you use SQL to drop and re-create these functions and their associated indexes, even though the underlying tables and indexes have not changed.

Note. For Microsoft SQL Server and DB2 UNIX platforms, if your database has tables containing the MSSCONCATCOL or DBXCONCATCOL column, you will see SQL alter the tables and re-create their associated indexes, even though the underlying tables and indexes may not have changed.

Review the output from the SYSAUDIT and DDDAUDIT reports and correct any discrepancies.

Your DDDAUDIT listing shows some expected discrepancies. Tables and views deleted from the Application Designer are not automatically deleted from the system tables. Oracle takes this precaution in case you have customized information that you want to preserve. Therefore, the report lists any tables and views that the new release does not have. Review these tables to verify that you do not wish to preserve any custom data, and then drop the tables and views.

Your SYSAUDIT report may have some errors due to references to obsolete PeopleSoft-owned objects. For instance, if a PeopleSoft Permission List is deleted, and you have a Role that still refers to that Permission, then it will appear on the SYSAUDIT report.

See the Enterprise PeopleTools PeopleBook: Data Management for your new release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 4-20-6: Run a Final SETINDEX Report

The SETINDEX SQR updates index overrides stored in the PSIDXDDLPARM table. The SQR updates the values stored in the PARMVALUE field with current values found in the system catalog. Running SETINDEX cleans up fragmentation issues that may have occurred during data conversion.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	DB2 z/OS Oracle	All

Task 4-20-7: Run a Final SETTABLE Report

The SETTABLE SQR updates table overrides stored in the PSRECDDLPARM table. The SQR updates the values stored in the PARMVALUE field with the current values found in the system catalog. Running SETTABLE will clean up fragmentation issues that may have occurred during data conversion.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Oracle	All

CHAPTER 5

Complete Database Changes

This chapter discusses:

- Understanding Database Changes
- Configuring the Upgrade Environment
- Reapplying Customizations
- Setting Up Security
- Completing Portal Data Conversion
- Reviewing PeopleTools Functionality
- Refreshing the Query Access List Cache
- Upgrading Navigation Codes
- Reapplying Custom Correspondence System Data
- Completing Correspondence Management
- Updating Service Level Setup
- Setting Up Trees for 360 Degree View
- Setting Up Mobile 360 Degree View
- Setting Up Related Actions
- Converting Contact List Data
- Encrypting Credit Card Data
- Verifying Role Type Definitions
- Adding Partner Details
- Specifying Default Category in Webform Definition
- Setting Up Tableset Control
- Preparing the Content Provider Registry
- Verifying REN Permissions for Chat
- Updating the Portal Options Data
- Completing Data Setup for CRM
- Stamping the Database
- Reviewing Change Control
- Backing Up Before Testing

• Testing Your Copy of Production

Understanding Database Changes

Many changes were made in the previous chapters of this documentation. In this chapter, you complete these changes so that you can begin testing your Copy of Production. By testing your Copy of Production, you ensure that you can still operate day-to-day processes on your new PeopleSoft release.

Task 5-1: Configuring the Upgrade Environment

This section discusses:

• Configure Application Server

• Configure Portal

Task 5-1-1: Configure Application Server

Running Portal requires a fully functional application server domain. In this step, you configure your application server.

Note. If you configured your application server earlier in the upgrade, you can skip this step.

Tips for configuring and starting the application server:

• Make sure that the Application Server domain you configure points to the Target database for this pass of the upgrade.

• Set a different JSL port for each database instance.

See the Enterprise PeopleTools installation guide for your database platform.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-1-2: Configure Portal

PeopleSoft applications are accessed through the Portal. You need to grant users access to complete the upgrade process. You must install and configure the Portal to complete the upgrade.

Note. If you configured your Portal earlier in the upgrade, you can skip this step.

You also must define a password on the Node Definitions page for Single Signon to work properly. If you do not define a password, the signon page appears when trying to access a report directly, instead of the report itself. To avoid this issue, follow the procedure below to assign a password.

To assign a password:

1. Select PeopleTools, Integration Broker, Integration Setup, Nodes.

2. Click Search.

3. Select the database's default local node.

   The default local node shows a *Y* in the Default Local Node column.

4. On the Node Definitions page, select *Password* in the Authentication Option field.

5. Enter a password in the Password field.

6. Enter the password again in the Confirm Password field.

7. Enter the default user in the Default User ID field.

8. Save the node definition.

9. Reboot the application server and web server.

See the Enterprise PeopleTools installation guide for your database platform.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-2: Reapplying Customizations

This section discusses:

• Understanding the Reapplication

• Performing Customized Object Adjustment

• Registering Portal Navigation Objects

Understanding the Reapplication

In this task, you work with your customized objects to ensure that they are properly integrated into your upgraded database.

When reapplying customizations to batch processes, please review the appendix "Reviewing Batch Program Changes" for information about changes in batch processes.

Task 5-2-1: Performing Customized Object Adjustment

When you reviewed your upgrade compare reports, you decided whether to take the Source or Target version of the objects. If you took the Oracle-delivered version of an object instead of your own customized version, you may need to customize the new objects to get the blend of new standard features and your custom features. In complex cases, this may take several iterations. You need to make manual adjustments to the objects to apply these customizations.

Once you reapply all of your customizations, you should run the DDDAUDIT and SYSAUDIT reports to make sure that you did not introduce any problems into your system.

Reapply any Mass Change or EDI customizations.

See "Prepare Your Database," Identifying Customizations.

Be aware that you must not overwrite Oracle-loaded data. The customizations, extracted during an earlier step, must be manually applied now.

In another step, you applied the Oracle-delivered record group assignments.

See "Apply Application Changes," Loading Data for Data Conversion, Importing Record Groups.

If you maintain any custom record group assignments, reapply them to your Copy of Production database now.

During Move to Production passes, you will not need to reapply these customizations. The changes you make now will be copied to any subsequent Copy of Production database using Data Mover scripts.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 5-2-2: Registering Portal Navigation Objects

You must register your customized objects, such as menus and components, in order to access them in Portal. You can use the Registration Wizard or the Menu Import process to grant access to the appropriate components. Make sure that you register your components for all of your portals (for example, Customer, Supplier, Employee, and so forth). Also, make sure that you select the node name that matches the database. Do not use the Local node.

See the Enterprise PeopleTools PeopleBook: PeopleSoft Application Designer for your new release, "Using the Registration Wizard."

See the Enterprise PeopleTools PeopleBook: Internet Technology for your new release, "Administering Portals."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 5-3: Setting Up Security

This section discusses:

- Understanding Security
- Set Up Security
- Synchronize CREF Permissions
- Grant Access to Personalize Homepage

Understanding Security

In this task you perform steps to set up security, grant access to the user ID, set up permissions lists, and grant access to navigation and homepages.

Task 5-3-1: Set Up Security

This section discusses:

- Understanding Security Setup

Understanding Security Setup

Select the PeopleTools, Security folder now to add the new PeopleSoft PeopleTools and application menus, delete old menus, and set up appropriate operator security for your system.

Many menu additions and deletions have occurred. Examine the menu compare report and the PeopleSoft Demo database for details of the required security changes, then decide which of your roles and permission lists should have access to each of the new menus.

Many tasks in this chapter instruct you to select a specific menu within the new PeopleSoft release. To perform these tasks, set up appropriate security for each of the menus referenced in each of the tasks.

See the PeopleSoft Enterprise Portal Solutions PeopleBook: Enterprise Portal Application Technology for your new release, information on Oracle-delivered security.

Note. Move to Production: If you changed the user profiles in your production system after you froze your PeopleSoft PeopleTools, you must manually apply the changes to your Copy of Production database before the end of the final Move to Production.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 5-3-2: Synchronize CREF Permissions

This section discusses:

- Understanding Content Reference Permissions
- Running the Portal Security Synchronization Process

Understanding Content Reference Permissions

As part of the PeopleSoft PeopleTools 8.4x Portal architecture, Portal Registry Structures reference permission lists. At this point, however, the Portal Registry Structures copied from the Demo database do not reference any permission lists on the Copy of Production database. This synchronization program will match the existing permission lists to the appropriate Registry Structures and update it.

Note. The user ID that invokes this process must have the security role Portal Administrator. Otherwise, the process may terminate abnormally.

Note. Your Process Scheduler must be running to perform this task.

Running the Portal Security Synchronization Process

Follow the steps below to run the Portal security synchronization process.

To run the security synchronization process:

1. From your browser, sign in to your Target database.

2. Select PeopleTools, Portal, Portal Security Sync.

3. Click Add a New Value.

4. Enter the run control ID *UPG_PORTAL_SYNC_BOTH*.

5. Click Add.

6. Keep the default value for the default portal registry name in the Portal Name field (for example: *EMPLOYEE*, *CUSTOMER*, or *SUPPLIER*.)

7. Click Save.

8. Click Run.

9. In the Process Scheduler page, check that you set your parameters correctly.

10. Click OK.

11. Click the Process Monitor link to monitor the program's process.

12. Repeat steps 6 through 11 for each Portal name used in the database for your specific applications.

    With each repetition, in step 6 change the Portal Name field to one of the following: *EMPLOYEE*, *CUSTOMER*, *SUPPLIER*, *MOBILE*, and so on.

13. Review any messages received during the running of this process with your Portal Administrator.

See the Enterprise PeopleTools PeopleBook: Internet Technology for your new release.

Note. If the permission lists for your upgrade user do not allow you access to a component, you will encounter this error when running the security synchronization process for that page: `Security synchronization failed for Portal Object.` This error may indicate other problems with the component or folder, but you should check your security first.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 5-3-3: Grant Access to Personalize Homepage

This section discusses:

• Understanding Access to Portal Homepage

• Updating Homepage Personalization Permission List

• Adding the Portal User Role

Understanding Access to Portal Homepage

You must complete this step if you use any of the Portal Pack products or pagelets. To add, remove, or change the layout of the homepage, you must grant homepage personalization security access to all non-guest users.

Updating Homepage Personalization Permission List

To update the homepage personalization permission list:

1. Using PeopleSoft Data Mover, sign in to the Target database.

2. Open the Data Mover script *PS_HOME*\SCRIPTS\PORTAL_HP_PERS.DMS.

3. Run this script against the Target database.

4. Close Data Mover.

Adding the Portal User Role

To add the Portal User Role to the user IDs:

1. Using PeopleSoft Data Mover, sign in to the Target database.

2. Open the Data Mover script *PS_HOME*\SCRIPTS\PORTAL_ADD_ROLE.DMS.

3. Run this script against the Target database.

4. Close Data Mover.

Note. You should grant the PAPP_USER role to all new user IDs for access to the homepage personalization. After running this script, manually remove the role PAPP_USER from any GUEST user ID, because a GUEST user should not be personalizing the common homepage.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 5-4: Completing Portal Data Conversion

This section discusses:

- Reviewing Pagelet and Collection Log
- Enabling Pagelet Publishing

Task 5-4-1: Reviewing Pagelet and Collection Log

This section discusses:

- Correct Logged Issues
- Run UPGPT846PP Again

This step explains how to correct logged issues for Navigation Collections, Portal Registry objects, and Pagelet Wizard objects.

Note. Perform this step only if there are logged issues that need to be resolved for Navigation Collections, Portal Registry Objects, or Pagelet Wizard objects reported from the UPGPT846PP process.

Correct Logged Issues

Review the log from running the data conversion UPGPT846PP Application Engine program in the task titled, "Completing PeopleTools Conversion." Correct the issues from the log using the instructions in the MAIN section comments of the UPGPT846PP program. These instructions were reported in the chapter 2 task "Converting PeopleTools Objects" in the "Report Conversion Details" step.

See "Apply Application Changes," Completing PeopleTools Conversion.

See "Apply PeopleTools Changes," Converting PeopleTools Objects, Report Conversion Details.

Run UPGPT846PP Again

In this step, you run the UPGPT846PP process again.

Note. The Application Engine process UPGPT846PP can be run repeatedly, if necessary, as you resolve data issues.

To run UPGPT846PP again:

1. Run the Application Engine conversion process UPGPT846PP with the upgrade user ID.

   The program can be run from the command line with the following:

   ```
   $PS_HOME\bin\client\winx86\psae -CD dbname  -CT dbtype -CS dbservername -CO ⇒
   oprid -CP oprpswd -R 1  -AI UPGPT846PP
   ```

2. Review the log file according to the instructions in the previous step.

3. If there are any remaining issues, correct them and rerun UPGPT846PP.

4. Repeat steps 2 and 3, if necessary, until there are no remaining issues for Navigation Collections, Portal Registry objects, or Pagelet Wizard objects.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-4-2: Enabling Pagelet Publishing

This step enables the creation of homepage pagelets for Navigation Collections and Pagelet Wizard. The script name for your upgrade path is:

```
PTPP_PORTAL_PACK.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-5: Reviewing PeopleTools Functionality

The PeopleSoft Enterprise PeopleBooks detail the current PeopleSoft PeopleTools functionality. There are many new features delivered in the new release that you may want to use. You should now review the PeopleSoft Enterprise PeopleBooks and PeopleTools Installation Guide to configure your environment properly. This may include, but is not limited to, configuring and starting a process scheduler, report server, and reviewing portal settings.

See the Enterprise PeopleTools installation guide for your database platform on your new release.

See Oracle's PeopleSoft Customer Connection (Implement Optimize + Upgrade, Upgrade Guide, Upgrade Documentation and Software, Release Notes).

You should review the following considerations:

- If you applied a PeopleSoft PeopleTools patch earlier in the upgrade, review the patch documentation and run any steps that you have not already performed during the upgrade.

  Check your Change Assistant output directory if you do not know whether a script was already run during the upgrade process.

- You must reimplement any workflow that you want to use in the new release.

- Oracle has updated the styles that define the look of the user interface.

  The classic (old) style sheet, as well as two new styles, are delivered with this release of PeopleSoft PeopleTools. The PeopleSoft PeopleTools system databases and PeopleSoft 8.4 applications use the classic style, whereas all other applications use the new dark blue style. After the PeopleSoft PeopleTools portion of the upgrade, Oracle sets the classic style as the default, but you can update to one of the new user interface styles.

  See Appendix: "Changing the User Interface."

> **Note.** The new user interface styles are supported by Internet Explorer release 5 and above and Netscape Navigator release 6 and above. If you are using any other browser or release, the system uses the classic style as the default.

- PeopleSoft PeopleTools uses Verity release 5.0 to implement free text search.

  Verity 5.0 is not compatible with the version of Verity that was used in previous PeopleSoft PeopleTools releases. Check the necessary application patches that may be required to use the new version of Verity.

  See PeopleSoft Customer Connection (Updates + Fixes, Required for Install or Upgrade).

- As a result, performing PS/nVision drill-down operations on reports that were created prior to upgrade would fail. This is mainly because drill-down hyperlinks are by design hard coded into PS/nVision reports. A simple search and replace utility has been provided that can be used to replace old hyperlinks with new ones. This Microsoft Excel macro is located at %PS_HOME%\EXCEL\UpdateNvsDrill.xls.

- Integration Broker was rewritten in PeopleSoft PeopleTools 8.48.

  If you use Integration Broker, you will need to perform setup configuration and review the explanation of metadata mapping.

  See Enterprise PeopleTools PeopleBook: Integration Broker, Appendix: "Understanding Migrated Integration Metadata," for your new release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 5-6: Refreshing the Query Access List Cache

In this task, you refresh the Query Access List Cache table.

To refresh the Query Access List Cache table:

1. Log in using the administrator login and password, VP1/VP1.
2. Select PeopleTools, Security, Query Security, Query Access List Cache.
3. Clear the Disable Access List Cache option.
4. Select the Enable Access List Cache option.
5. Click Run to launch the application engine process.
6. Click Process Monitor. Ensure that the PSQRYACCLIST process is successful.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-7: Upgrading Navigation Codes

This section discusses:

- Understanding Navigation Codes for Enterprise Portal Database
- Copying the CRM_NAVFILTER Project
- Updating the Portal Registry Security
- Updating the Navigation Filter
- Deleting the Enterprise Portal Cache

Understanding Navigation Codes for Enterprise Portal Database

This task applies Customer Relationship Management (CRM) for Financial Services Industries (FSI) navigation codes onto the Enterprise Portal database. Perform this task only if you have copied the new CRM portal objects into your Enterprise Portal database's default portal definition (EMPLOYEE).

When you upgraded the Content Provider Registry, you created a copy of your Enterprise Portal database.

See Upgrading Content Provider Registry.

You use this copy for all steps in upgrading navigation codes for the initial and test Move to Production upgrade passes.

See Testing the Move to Production.

For the final Move to Production, you will not make a copy. Instead, you will perform all steps on the Enterprise Portal production database.

This document uses the term "target Enterprise Portal database" to refer to the Enterprise Portal database used in the upgrade steps. Use the following table to determine the correct copy of your Enterprise Portal database for each pass:

Upgrade Pass	Target Enterprise Portal Database
Initial pass	Copy of the Enterprise Portal database
Test Move to Production	Copy of the Enterprise Portal database
Final Move to Production	Enterprise Portal production database

---

Note. For this task only, the DB Orientation listed at the end of each step has a different meaning: Source is used to specify the CRM Demo database for every pass. Target is used to specify the target Enterprise Portal database.

Task 5-7-1: Copying the CRM_NAVFILTER Project

This section discusses:

• Copying the CRM_NAVFILTER Project to File

• Copying the CRM_NAVFILTER Project to the Database

Copying the CRM_NAVFILTER Project to File

First, copy the project from the Demo database to a temporary file.

To copy the CRM_NAVFILTER project to file:

1.   On your CRM Demo database, launch Application Designer.

2.   Select File, Open...

3.   For the Definition, select *Project* and click Open.

4.   Select the project *CRM_NAVFILTER* and click Open again.

5.   Select Tools, Copy Project, To File...

6.   Click the Browse button for the Export Directory.

7.   Navigate to a temporary directory and click OK.

8.   Click Select All.

9.   Click Copy.

10. Quit Application Designer.

Copying the CRM_NAVFILTER Project to the Database

Next, copy the project from the temporary file to your target Enterprise Portal database.

To copy the CRM_NAVFILTER project to the target Enterprise Portal database:

1.   On your target Enterprise Portal database, launch Application Designer.

2.   Select Tools, Copy Project, From File...

3.   Browse to the CRM Demo database server's temporary directory.

4.   Select the CRM_NAVFILTER project file that you just created in the previous step.

5.   Click Open.

6.   Click Select All.

7.   Update your language options as follows:

     a.   Click Options.

     b.   In the Copy Options tab, select *English* and *COMMON*.

     c.   If your Enterprise Portal (PA) database is a multi-language database, select the other languages you have installed.

d. Click OK.

8. Click Copy.

9. Select the Upgrade tab and review the Output window.

    All objects should be copied successfully.

10. Quit Application Designer.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-7-2: Updating the Portal Registry Security

In this step, you copy the navigational security for each FSI role.

To update the portal registry security:

1. Copy the following files from your CRM Demo database <PS_HOME> directory to the target Enterprise Portal database <PS_HOME> directory:

    • \SCRIPTS\PORTAL_CR840_NAVSRTY.DMS

    • \DATA\PORTAL_CR840_NAVSRTY.DAT

2. On your target Enterprise Portal database, launch Data Mover in bootstrap mode.

3. Open the following script in <PS_HOME>\SCRIPTS:

    `PORTAL_CR840_NAVSRTY.DMS`

4. Select File, Run Script to run this script against the target Enterprise Portal database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-7-3: Updating the Navigation Filter

In this step, you update the filter names on the CRM folders from CRM values to Enterprise Portal values.

To update the portal registry navigation filter:

1. Copy the following script from the CRM Demo database <PS_HOME>\SCRIPTS directory to the target Enterprise Portal database <PS_HOME>\SCRIPTS directory:

    `PORTAL_CR840_NAVFILTER.DMS`

2. On your target Enterprise Portal database, launch Data Mover.

3. Open the Data Mover script you just copied.

4. Select File, Run Script to run this script against the target Enterprise Portal database.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-7-4: Deleting the Enterprise Portal Cache

In this step, you delete the Enterprise Portal database cache.

To delete the Enterprise Portal database cache:

1. Delete the target Enterprise Portal database application server cache.

2. Stop and restart the target Enterprise Portal database web server service.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-8: Reapplying Custom Correspondence System Data

If you have modified the PeopleSoft CRM 8.8 or 8.9 system data for Correspondence Management (e.g. the Template, Template Package, etc.), the changes are lost after you complete the tasks in Chapter 4, where your customizations are overwritten by the CRM 9.0 delivered system data.

To determine which customizations you will need to reapply to the system data at this stage in the upgrade, you must inspect each of your changes found in your Production database, and then compare them to this Copy of Production database.

To access and review the Correspondence Management system data in PIA:

• Select Set Up CRM, Common Definitions, Correspondence.

• Inspect the details for each of the Correspondence items highlighted here to determine the need for reapplying your customizations:
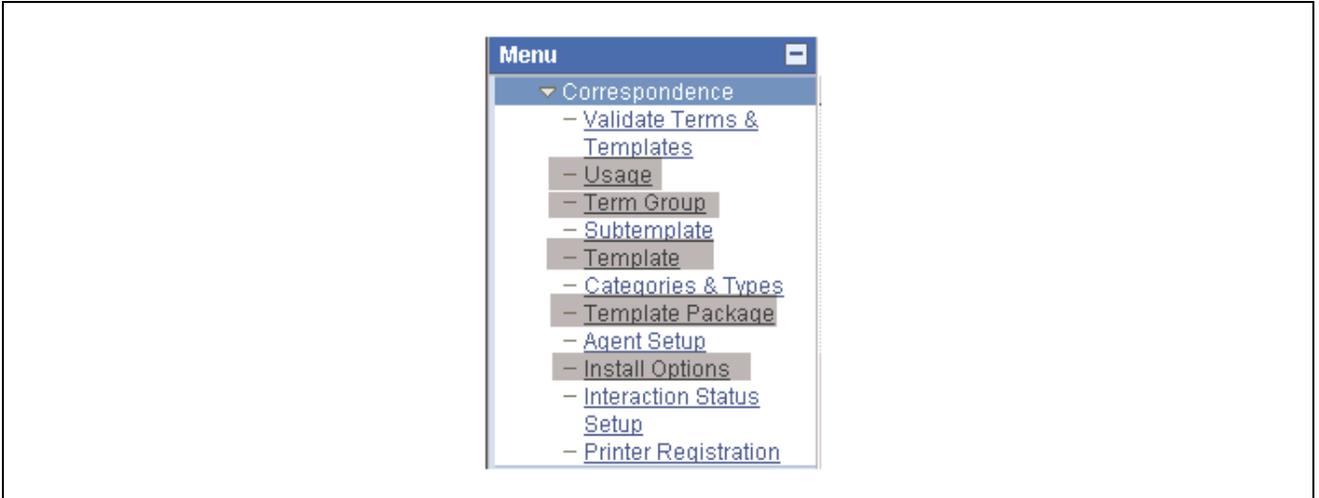
Correspondence menu highlighting system data items to be reviewed

In the following example from the Production database (pre-upgrade), the circled area in the Required column signifies customizations made to the CRM 8.9 system data: Template Name = Order Status
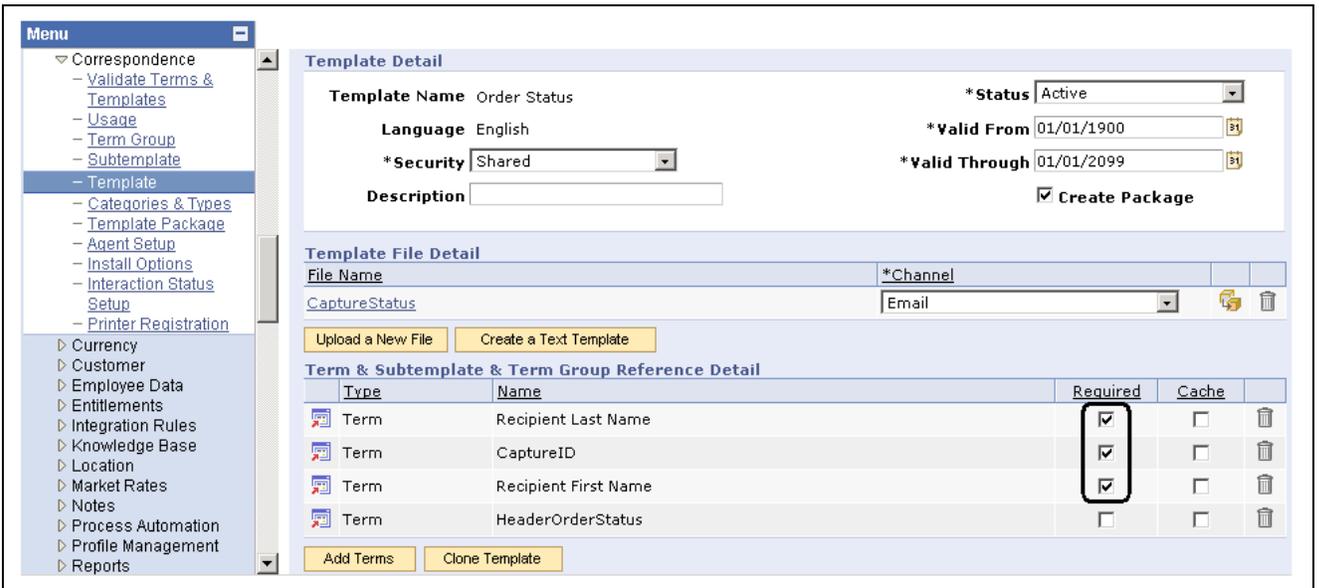
Production database pre upgrade—customizations noted by the selections in the Required column

In the following example from the Copy of Production database (post upgrade), the customizations to the system data have been overwritten by the CRM 9.0 delivered system data:
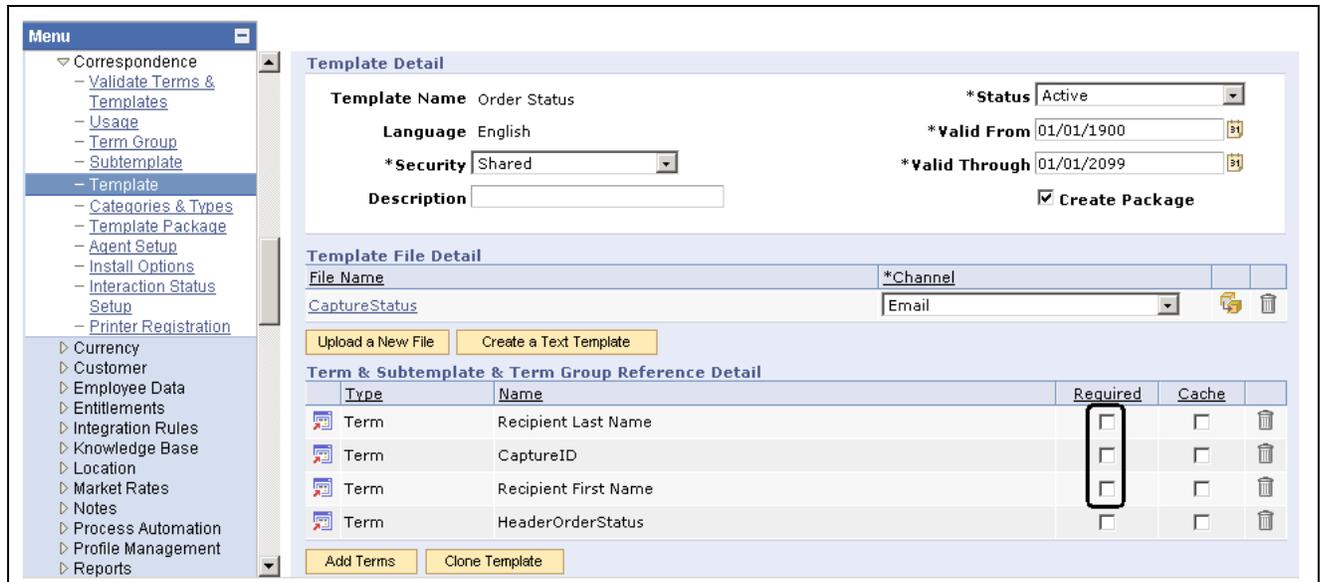
Copy of Production database post upgrade—customizations overwritten

Among all system data tables, the loss of your customizations to CRM system data for Correspondence Management may occur in the following tables:

- RBC_PACKAG_TMPL
- RBC_PACKAGE_DFN
- RBC_PACKAGE_FIL
- RBC_PACKAGE_USG
- RBC_TEMPLAT_DFN
- RBC_TEMPLAT_FIL
- RBC_TEMPLAT_TKN
- RBC_TKNGRP_DFN
- RBC_TKNGRP_DTL
- RBC_USAGE_DFN
- RBC_USAGE_DTL
- RBC_INTLAYOUT
- RBC_CM_SYSDEFN

Therefore, alternately, you may compare data in the preceding tables between the two databases, i.e. the Production database (pre-upgrade) versus the Copy of Production database (post upgrade), to find and recover your customizations to Correspondence Management system data.

Note. Any *new data* that you added to Correspondence Management is not lost after the upgrade.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-9: Completing Correspondence Management

Correspondence Management now uses *Terms* instead of Tokens to resolve run-time data. For any custom-made Correspondence Template in your database, you must convert the Tokens that are used on the template to Terms.

To convert Tokens to Terms:

1. Select Set Up CRM, Common Definitions, Correspondence, Template, and then open your custom-made Correspondence Template.

2. Select the Tokens that will need to be converted, now listed as type *Term* (under Term & Subtemplate & Term Group Reference Detail).

3. Click Create New Term in the Active Analytics Framework (AAF). Verify that the Term Name and Display fields contain the same name as the Token's User Friendly Name (listed in the Term & Subtemplate & Term Group Reference Detail section when performing step 2).

4. On your custom-made Correspondence Template, select the old Tokens, and then click Delete.

5. Based on file type, do one of the following:

   • If the Template file is in Internal file format, click the File link on the Template page, and then click OK.

   The new Terms that you just created in step 3 now populate the Term & Subtemplate & Term Group Reference Detail section.

   • If the Template file is in External file format (such as .doc or .rtf), click the Add Terms button on the Template page, and manually add the new Terms to the Template that you just created in step 3.

6. Click Save to save your changes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	All	All

Task 5-10: Updating Service Level Setup

In the new release, Customer Relationship Management (CRM) includes a new and required field, Cost Category Code, for the service level definition. Because the user defines the cost category code, this value cannot be set automatically during the upgrade. Therefore, after the upgrade you must select Service Level on the menu to open the service level definition, as shown in the following example, and enter a value in the Cost Category Code field.
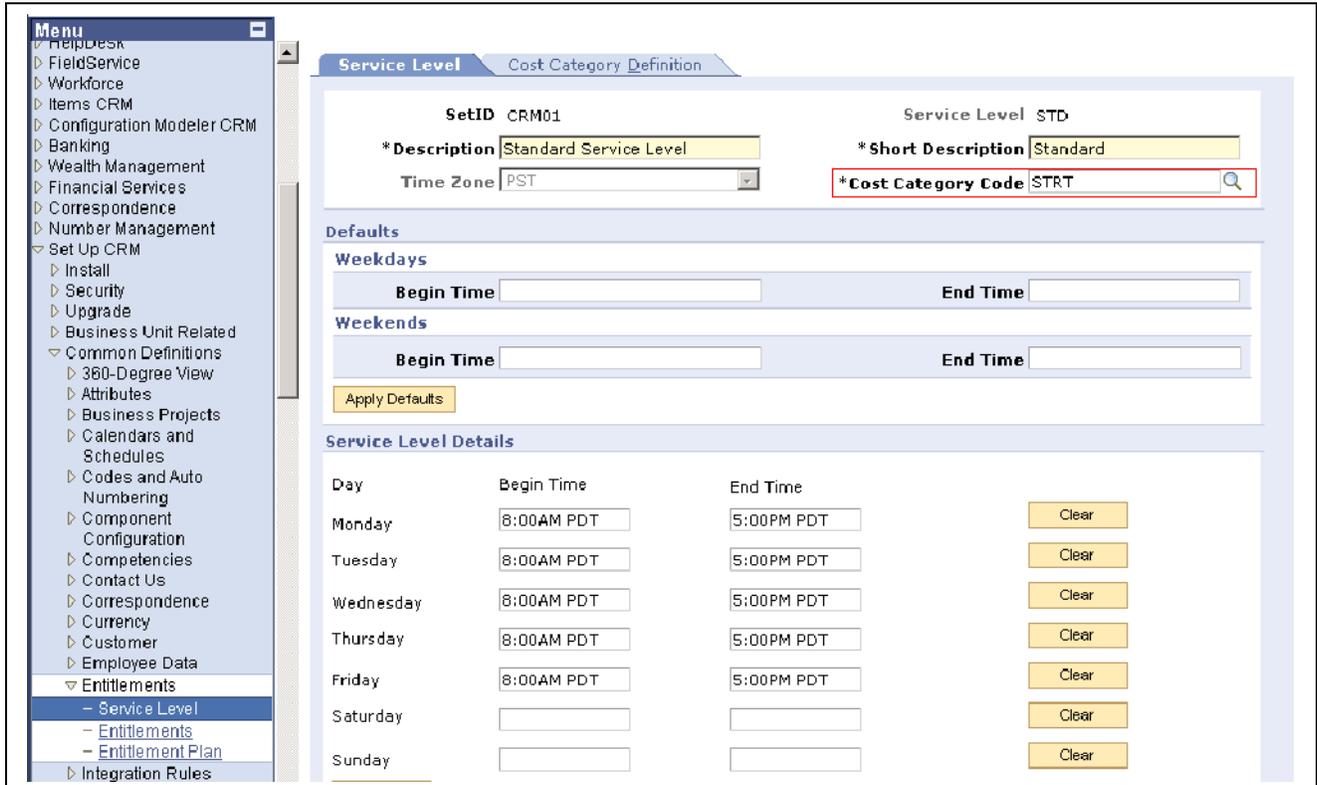
Service Level tab

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Support FieldService	All	All

Task 5-11: Setting Up Trees for 360 Degree View

To utilize the 360-Degree View functionality, you must set up a new 360-Degree View Tree. When setting up the tree, you can specify the tree structure, the images that appear on the tree, its size on the page, and which transaction should appear for each node on the tree.

Note. Complete this task if you plan to use the 360-Degree View. Otherwise, you can skip this task and move forward with your upgrade.

To set up Trees for 360-Degree View:

1. Select Set Up CRM, Common Definitions, 360-Degree View, Set Up Tree.

2. Select the Add a New Value tab.

3. Enter a value in the Tree Name field, and then click the Add button.

Set Up Tree page

4. From the Set Up Tree page, click the arrow next to the Market field to select the market that uses this tree from the drop-down list.

5. Select the Default Tree check box to set this tree as the default tree that appears for this market on the 360-Degree View.

6. Select the Mobile check box if the Mobile 360-Degree View is going to use this tree.

7. From the Tree Node page, add the ROOT node by selecting ROOT from the Tree Node drop-down list, and then click Save.

8. Once the tree is created, select Set Up CRM, Common Definitions, 360-Degree View, Configure Role.

9. Select the Add a New Value tab.

10. Click the look up button next to the Role Name field to select a role name, and then click the Add button.

11. Click the look up button next to the Transaction Name field.

Configure Role page

12. Select the transaction name that associates with the type of tree that you are configuring.

13. Click the look up button next to the Tree Name field to select a tree name.

14. Click the look up button next to the Profile field.

15. Select the profile that you want to use to display customer summary data on 360-Degree View.

Examples: Core Profile, Communications Profile, Energy Profile, FSI Profile, HR Help Desk Profile, Insurance Profile, Worker.

16. Select the lowest sequence number that you want to assign to the role.

17. Click the arrow next to the View Type field to select the view type from the drop-down list.

Examples: Customer 360-Degree view is *Customer*, Worker 360-Degree View is *Worker*, HRHD Worker 360-Degree view is *HR HelpDesk Worker*, Partner 360-Degree view is *Partner*.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 5-12: Setting Up Mobile 360 Degree View

This section discusses:

• Understanding the Mobile 360 Degree View Setup

• Setting Up Relationship Viewer for Upgrade

• Setting Up the 360 Degree Viewer for Upgrade

• Setting Tab Numbers for Mobile 360 Degree View

• Setting Up Mobile Relationship Viewer for Upgrade

Understanding the Mobile 360 Degree View Setup

This task provides post-upgrade instructions for setup of Mobile and 360-Degree Viewer. If you are upgrading the PeopleSoft Enterprise Customer Relationship Management (CRM) Mobile product to the new release, perform these steps to fully utilize Mobile and 360-Degree Viewer functionality.

Task 5-12-1: Setting Up Relationship Viewer for Upgrade

To complete the upgrade setup for Relationship Viewer:

1. Select Set Up CRM, Install, Mobile, Mobile Customer Options.

2. Verify that as least one option delivered as system data: DFLT (Default)

3. Open the DFLT Option page.

   If the Relationship View Name column for Company, Contact, and Consumer appears blank, verify that the Show Relationship Viewer check box is clear.

4. If the relationship view names are not blank, click the look up button next to each of the names to verify that they exist in the Relationship Views setup.

5. If the relationship view does not exist, empty the existing value in the Relationship View Name field on the Mobile Customer Options page.

   Verify that the Show Relationship Viewer check box is clear.

6. After any changes, click Save.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Mobile Sales Mobile Order Capture Mobile Field Service	All	All

Task 5-12-2: Setting Up the 360 Degree Viewer for Upgrade

To complete the upgrade setup for 360-Degree Viewer:

1. If the 360 View Tree Name column is not blank, click the look up button next to each of the tree names to verify that they exist in the 360-Degree Views setup.

2. If the 360-Degree View name does not exist, empty the existing value in the 360 View Tree Name field on the Mobile Customer Options page.

   Verify that the Show 360 View check box is clear.

3. Click Save to save your changes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Mobile Sales Mobile Order Capture Mobile Field Service	All	All

Task 5-12-3: Setting Tab Numbers for Mobile 360 Degree View

For out-of-box Mobile customers who have not customized the Company, Contact, or the Consumer; specifically there has been no adding to or removing of tab pages in the previously mentioned component pages, follow these steps to set the tab numbers for Mobile 360-Degree View:

To set tab numbers for Mobile 360-Degree View:

1. On the Default Options page, verify that the numbers under the Role Type ID column and the Three Sixty View Tab Number column match the numbers in the following table:

Role Type ID	Three Sixty View Tab Number
2	12
8	13
9	13

2. Select Set Up CRM, Common Definitions, Customer, Customer Installation Options.

3. Verify that Mobile Customer Options is not blank.

   If it is blank, select Default from the drop-down list.

4. Click Save to save your changes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Mobile Sales Mobile Order Capture Mobile Field Service	All	All

Task 5-12-4: Setting Up Mobile Relationship Viewer for Upgrade

If you are using or plan to enable Mobile Relationship Viewer, perform these steps to complete your setup.

To use or enable Mobile Relationship Viewer:

1. Select Set Up CRM, Install, Mobile, Mobile Customer Options, and then select the option that is set up to be used by your mobile users.

2. If Show Relationship Viewer is clear, select the check box.

   The Relationship View Name column now appears in the grid.

3. Click the look up button next to the Relationship View Name column for each role type, and then select a relationship view from the drop-down list.

4. If there is nothing in the drop-down list to select, proceed to step 5.

   Otherwise, skip step 5 and proceed to step 6.

5. Select Set Up CRM, Common Definitions, Customer, Relationship Views.

6. Define a relationship view for each role type in use (Company, Contact, or Consumer).

7. Return to step 3 to use the newly defined relationship view.

   Repeat this step for each of the three role types.

8. Click Save to save your changes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Mobile Sales Mobile Order Capture Mobile Field Service	All	All

Task 5-13: Setting Up Related Actions

In the new PeopleSoft release, Related Objects functionality has been redesigned as Related Actions. A Related Action is a link group with various items within the link group called link definitions. The following task describes how to set up a related action link group and associate it with a display template. After you complete this task, you can see related actions as a drop-down list on the Case page with various link definitions as drop-down list items.

Note. Perform this task only if you have added a new related action. Otherwise, you can skip this task and move forward with your upgrade.

To set up a related actions link group:

1. Select CRM, Product Related, Call Center, Link Group.

2. Use one of the existing link groups in the following list, depending on which application you have, or create an entirely new link group as necessary.

   Depending on your requirements, PeopleSoft provides the following link groups specific to each application:

   • Support

   • Help Desk

   • HR Help Desk

- Financial Services
- Insurance
- Communications
- Energy
- Government
- Hi Technology

3. If you create a new link group, associate a new link definition under the newly created group.

Link Group page

4. Associate new links with this link group.

5. If you use one of the PeopleSoft-delivered link groups, you can skip the remainder of this task (steps 6 through 10).

6. Select Set Up CRM, Common Definitions, Component Configuration, Display Template Details.

7. Open the appropriate display template and associate the link group.

   The following list of case display templates are delivered by PeopleSoft:

   - Support
   - Help Desk
   - HR Help Desk
   - Financial Services
   - Insurance
   - Communication
   - Energy
   - Government
   - Hi-Technology

8. Open the display template for your application.

9. Associate the link group with the appropriate link display template, depending on what you want to display on the Case page.

   Refer to the following example:
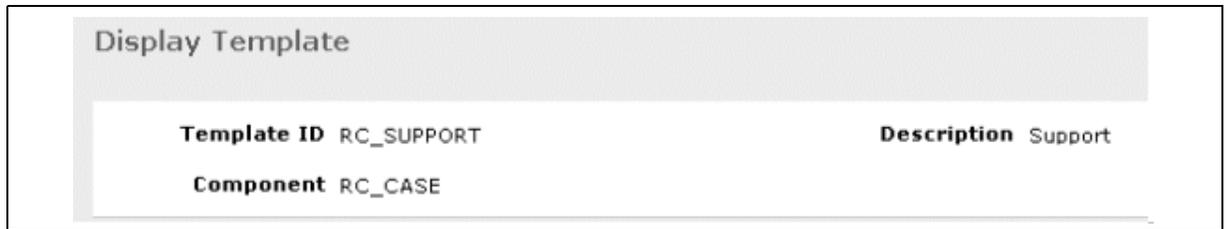
Display Template page
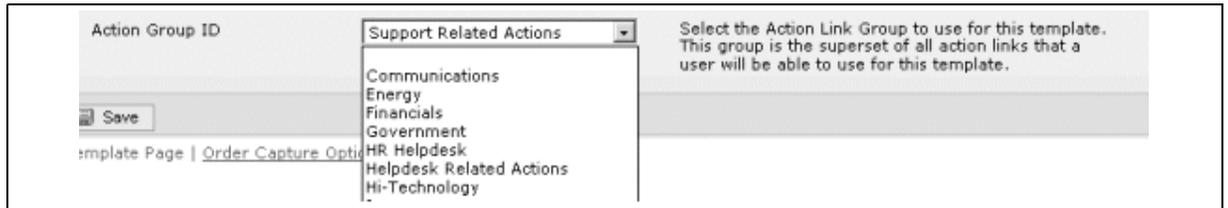
Action Group ID page

10. Save the display template and verify that the link definitions are displayed on Case page.
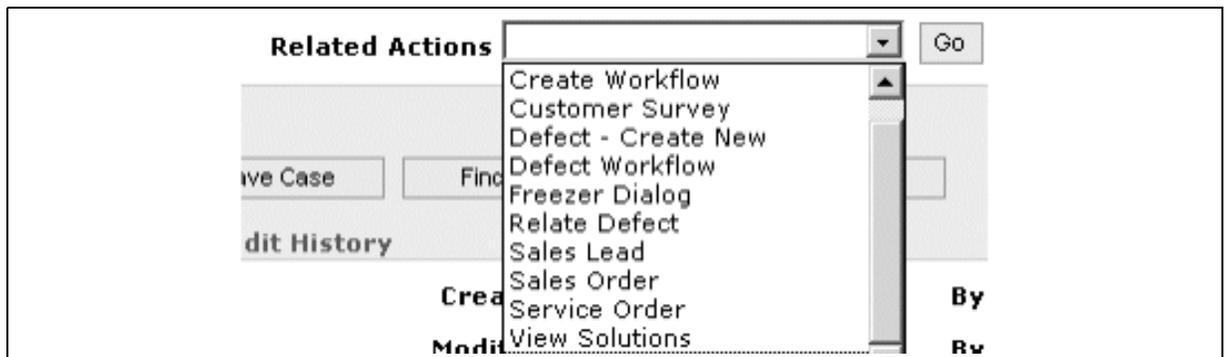
Case page

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	HR Help Desk	All	All

Task 5-14: Converting Contact List Data

This task applies to PeopleSoft customers who are currently using contact list data.

In the new release there is a new contact list structure. In this task, you use the Application Engine Program UPG_CDM_CONT to convert your existing contact list data to the new contact list structure. This process inserts contact lists for users of interest. The interested contacts can be contacts for leads, opportunities, and accounts that are either assigned to or owned by the users.

The UPG_CDM_CONT process requires you to specify the Auto Insert to My Contacts flag in the User Preferences component. Therefore, you can run this process only after you complete the standard upgrade process and define the user preferences.

To run the UPG_CDM_CONT upgrade process:

1. Select Set Up CRM, Security, User Preferences.

2. Select the Sales tab.
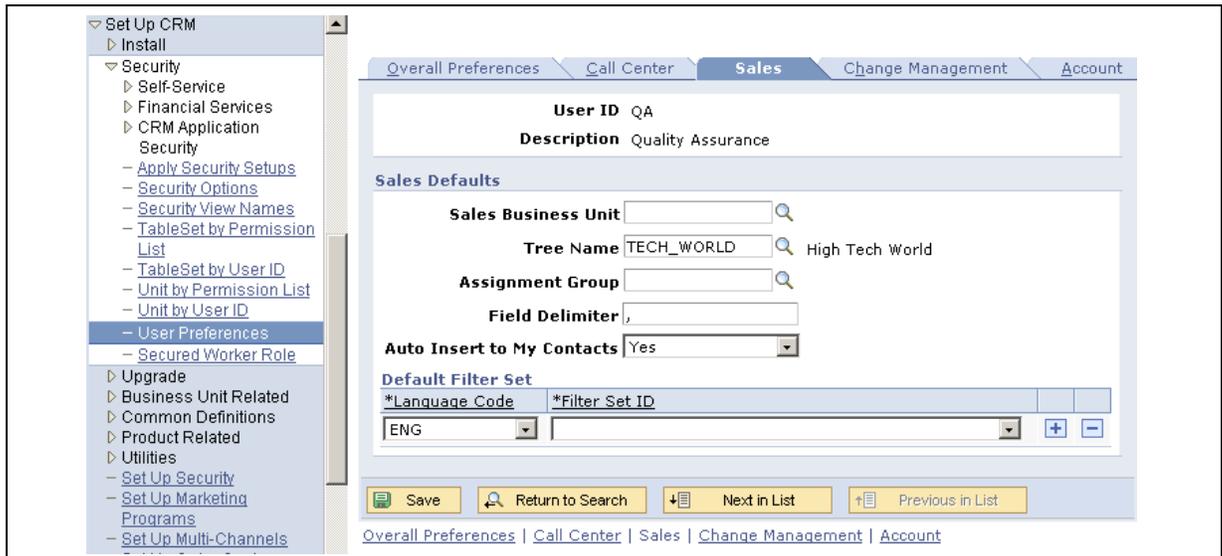
Sales tab

3. Set the Auto Insert to My Contacts field to *Yes*.

4. Select PeopleTools, Process Scheduler, System Process Requests.

5. Add a new run control ID.

6. In the Process Request dialog box, click the Run button.
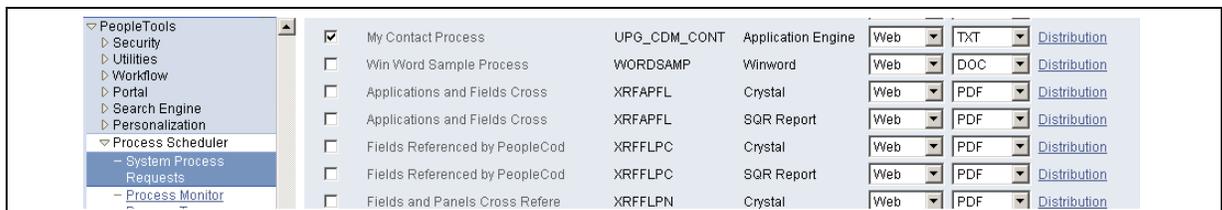
System Process Requests page

7. Select the My Contact Process check box.

8. Click OK.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-15: Encrypting Credit Card Data

This task applies to PeopleSoft customers who capture and maintain credit card data.

Note. If you have already applied the CRM - Credit Card Security Enhancement patch (Resolution ID = 649807 for 8.8 or Resolution ID = 654014 for 8.9), you will not need to execute this manual step.

In the current release, the credit card encryption and decryption process uses the 56-bit Data Encryption Standard (DES) encryption.

In the new release, the credit card encryption and decryption process has been enhanced to be in compliance with the cardholder data protection requirements of the Payment Card Industry (PCI) Data Security Standard and with Visa's Cardholder Information Security Program (CISP) by utilizing the Tools Pluggable Cryptography for strong encryption and decryption.

PeopleTools Pluggable Cryptography is an advanced security framework that introduces a new security model for applications to encrypt credit card data. This enhancement enables a stronger credit card encryption solution and upgrades existing credit card data. By using the Tools Pluggable Cryptography for strong encryption and decryption, the system encrypts data using 3DES algorithms and 168-bit encryption keys.

In this task, you use the Application Engine Program FS_CC_CNVRT to decrypt and re-encrypt your credit card data.

To run the FS_CC_CONVRT process:

1. Select PeopleTools, Portal, Structure and Content.
2. On the Structure and Content page, select Set Up CRM, Utilities, Credit Card Encryption.
3. Click the Add Content Reference link.
4. Create and save a new content reference, as shown in the following examples:

Credit Card Encryption page: General tab

Credit Card Encryption page: Security tab

Note. After adding the content reference permissions (CREF), it is recommended that you clear your browser cache and restart the browser before proceeding.

---

5. Select Set Up CRM, Utilities, Credit Card Encryption, Upgrade Credit Card Numbers.

6. Select the Add a New Value tab to add a new run control:

    UPG_CC_ENCRYPT

7. Click the Generate Random Key button.

Credit Card Number Upgrade page

8. Click the Run button.

    The Credit Card Conversion process converts each field in the grid, either encrypting or re-encrypting the value, depending on whether the current value is encrypted or cleartext. If the process fails for any reason, the process can be restarted in the standard way and the process will pick up where it left off. If the process cannot be restarted, the process can be run from the beginning, automatically bypassing fields that have already been processed.

Note. If you need to change the encryption key at any time after the initial conversion, you must re-encrypt all of your credit card data by navigating to the Credit Card Number Re-Encrypt page and doing the following:

To change the encryption key after conversion and re-encrypt your credit card data:

1. Select Set Up CRM, Utilities, Credit Card Encryption, Change Encryption Key.

2. Click the Generate Random Key button to generate a new random hexadecimal encryption key.

You can modify this key, however, you must format it as a 24-byte string in hexadecimal notation. The first two characters must be *0x*, and the remainder must be exactly 48 characters, consisting of a combination of numeric digits and lowercase letters *a* through *f*.

3. If the values in the Re-encrypt Action column do not display as *Decrypt, then Encrypt,* click the Crypt Action button until *Decrypt, then Encrypt* appears in the column.

4. Click the Run button to start the conversion process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-16: Verifying Role Type Definitions

Currently, the Customer Data Model upgrade process upgrades only the Role Type Definition system data that has not been modified. If you modified any of the Role Type Definition system data, a message similar to the following will appear on the corresponding page, indicating that the data has been modified:
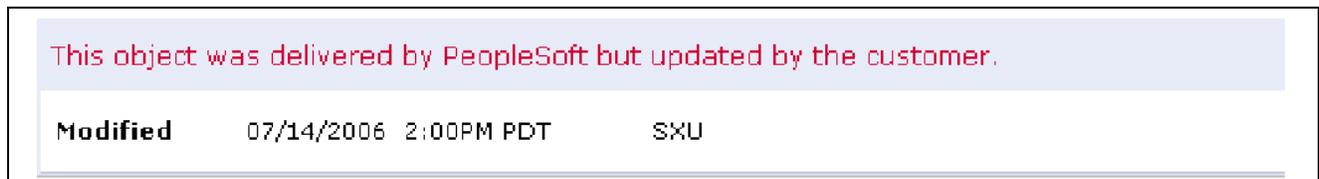
Example of Modified Data Message – Role Type Definition system data

To maintain synchronization with the latest Role Type Definition, you must compare your data with the data in the PeopleSoft-delivered Demo database and make any necessary changes to your data. To open the component for comparison, select Set Up CRM, Common Definition, Customer, Role Type.
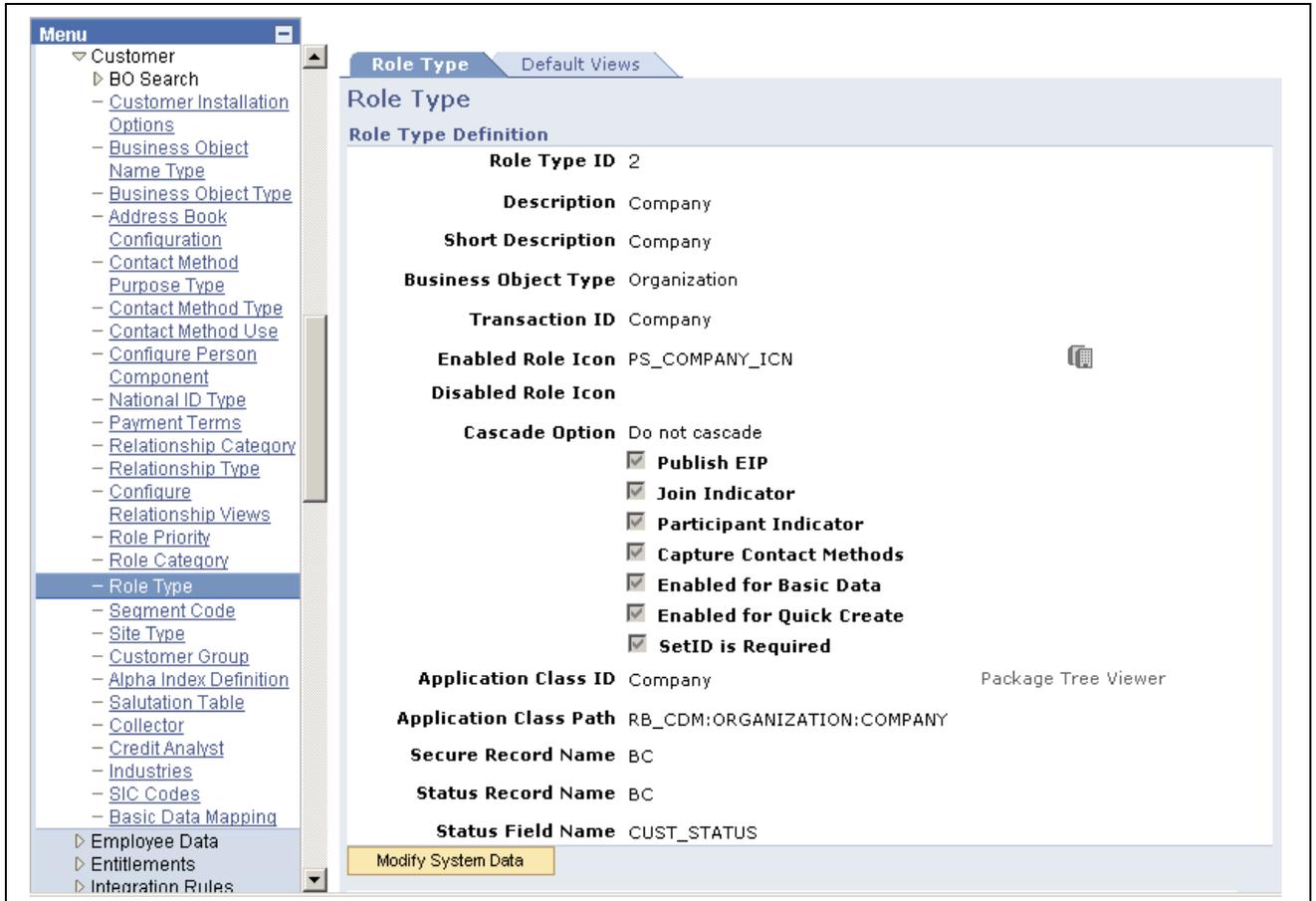
Role Type Definition page

You should pay particular attention to any modifications that you made to the following RoleTypes: Company, Site, Worker, Contact, Individual Consumer, Partner, Partnership, Alternate Capacity, Household, and Person of Interest.

Role Type ID	Business Object Type ID	Description
2	2	Company
3	2	Site
4	1	Worker
8	1	Contact
9	1	Individual Consumer
11	2	Partner
30	2	Partnership
31	2	Alternate Capacity
68	2	Household
88	1	Person of Interest

Role Types

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-17: Adding Partner Details

In the new release PeopleSoft added more robust functionality of Partner Relationship Management to the Customer Relationship Management application. In order to take advantage of this functionality you need to add additional partner information. Follow the steps in this task to add additional partner information.

Note. If you do not use partner functionality, you can skip this task.

You must add partner programs before you can add partner details.

To add partner programs:

1. Select Partner CRM, Add Partner Program.

2. Add a new Partner Program, and then click Save.

To add partner details for existing partners:

1. Select Customers CRM, Search Company.

2. Select a Partner name.

3. On the Company Summary window click the View Partner Data link.
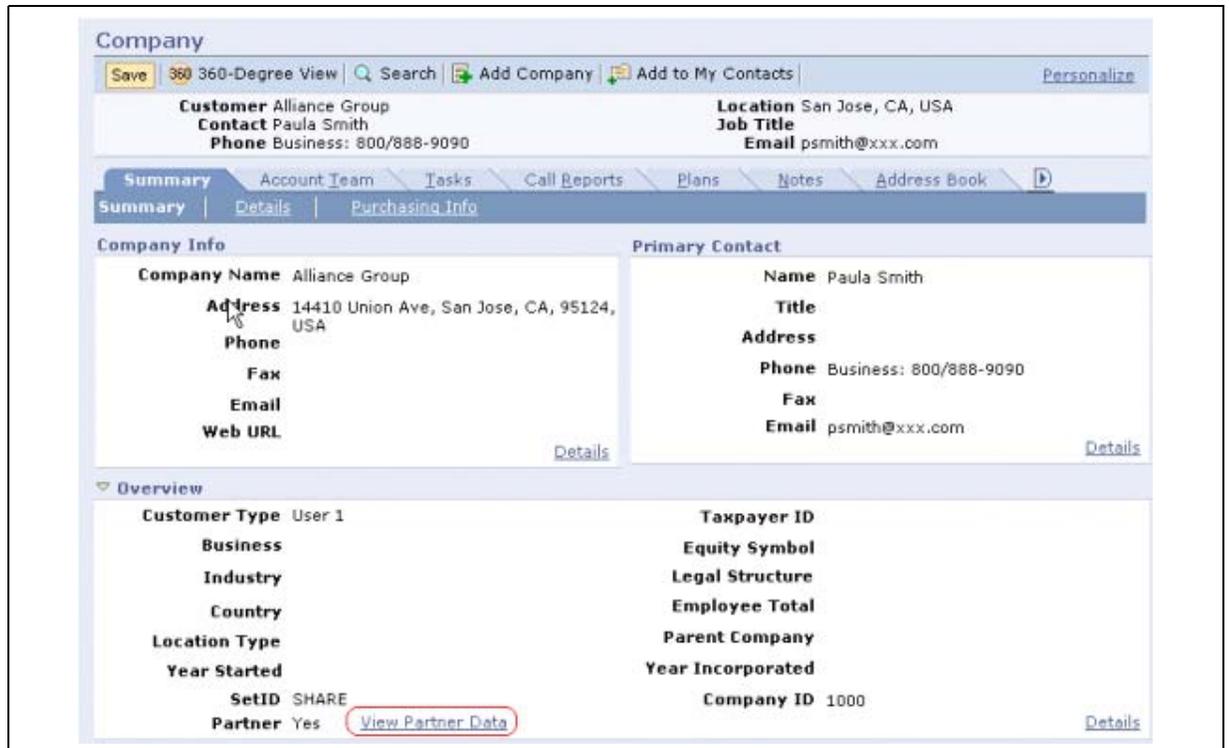
Company Summary Window

4. On the Partner Details window click the Add Partner Program button.

5. Click the Add Partner Program button to add Partner Programs. A Partner Program must be provided in order to save the Partner Company component.

6. You can optionally add other partner detail on other pages of the Partner Company component.

7. Click Save.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-18: Specifying Default Category in Webform Definition

This task requires you to login to PeopleSoft's Pure Internet Architecture (PIA) and open each of the custom-created Webforms, in order to specify default categories.

To specify default categories in Webform:

1. Select Set Up CRM, Product Related, Multichannel Definitions, Email, Define Servers and Security, Webforms.

2. On the Webform that you opened, if the field Default Category is blank, you must select the appropriate Default Category from the drop-down list, and then click Save.

Refer to the following example to specify default categories in Webform definitions:
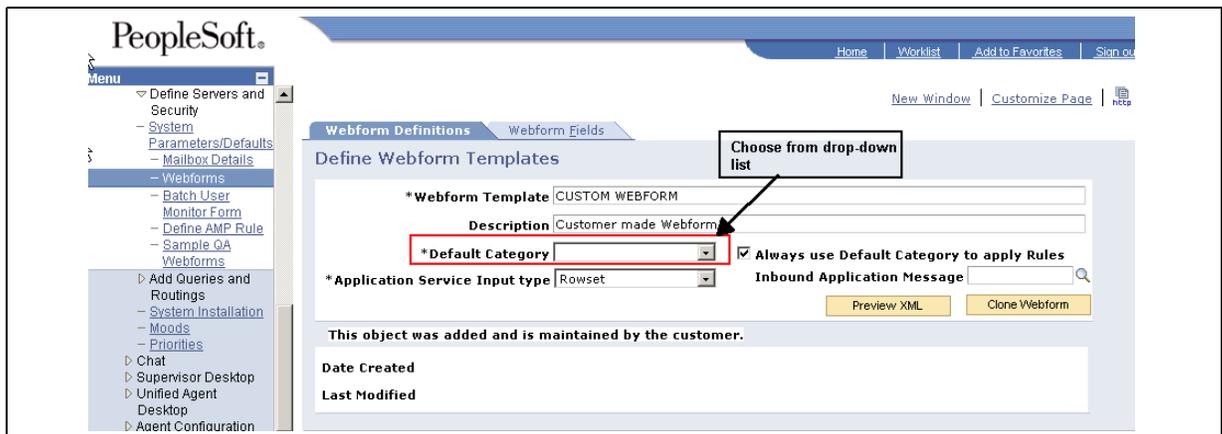
Webform Definitions tab - Define Webform Templates

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Multichannel Communications	All	All

Task 5-19: Setting Up Tableset Control

The Active Analytics Framework Policies are setID controlled. The delivered policies have a setID of SHARE. To utilize the delivered policies, the tableset control for your set control value must be set up to point to a setID of SHARE. This manual setup task can be done in the Tableset Control page.

To set up your set control value to point to a setID of SHARE:

1. Select PeopleTools, Utilities, Administrations, Tableset Control.

2. Open each of your business unit and setID set control entries, and set the AAF Record Group, EOCF01, to a setID of SHARE.

3. Click Save to save your changes.

   This manual setup enables you to utilize the delivered policies.

Alternatively, new policies can be created with a new setID, and this setID would then be used for the record group control, for record group EOCF01.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Support Field Service Sales Marketing Order Capture	All	All

Task 5-20: Preparing the Content Provider Registry

You should perform this task if you use Enterprise Portal 8.4 or higher running on PeopleTools 8.4x with full or partial navigation load access method. This means you do not use a single link to access your content provider databases, but instead you load some or all of the portal registry structures from the content provider database into your Enterprise Portal database. PeopleSoft refers to Content Provider databases as the application databases that contain the transaction content. Your Copy of Production database is your Content Provider database for this task.

When you upgrade a content provider database, the registry structures are updated, old registry structures are removed, and new registry structures are added. These changes need to be copied to the Enterprise Portal database by updating the portal registry structures in your Enterprise Portal database to match what is in the Content Provider database. Follow the detailed instructions in the appendix referenced below.

See Appendix: "Upgrading the Content Provider Registry."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-21: Verifying REN Permissions for Chat

In this task you will verify REN permissions for Chat.

To verify REN permissions for Chat:

1. Login as VP1/VP1, or any user that has access to Permission Lists.

2. Select PeopleTools, Security, Permission Lists & Roles, Permission Lists.

3. In the Search dialog box, enter *CRRB6200*, and then click Search.

Permission Lists page: Find an Existing Value tab

4. Select the PeopleTools tab, and then click the Realtime Event Notification Permissions link on this page.

Permission Lists page: PeopleTools tab

5. This opens the REN Permissions page.

Click the Full Access (All) button.
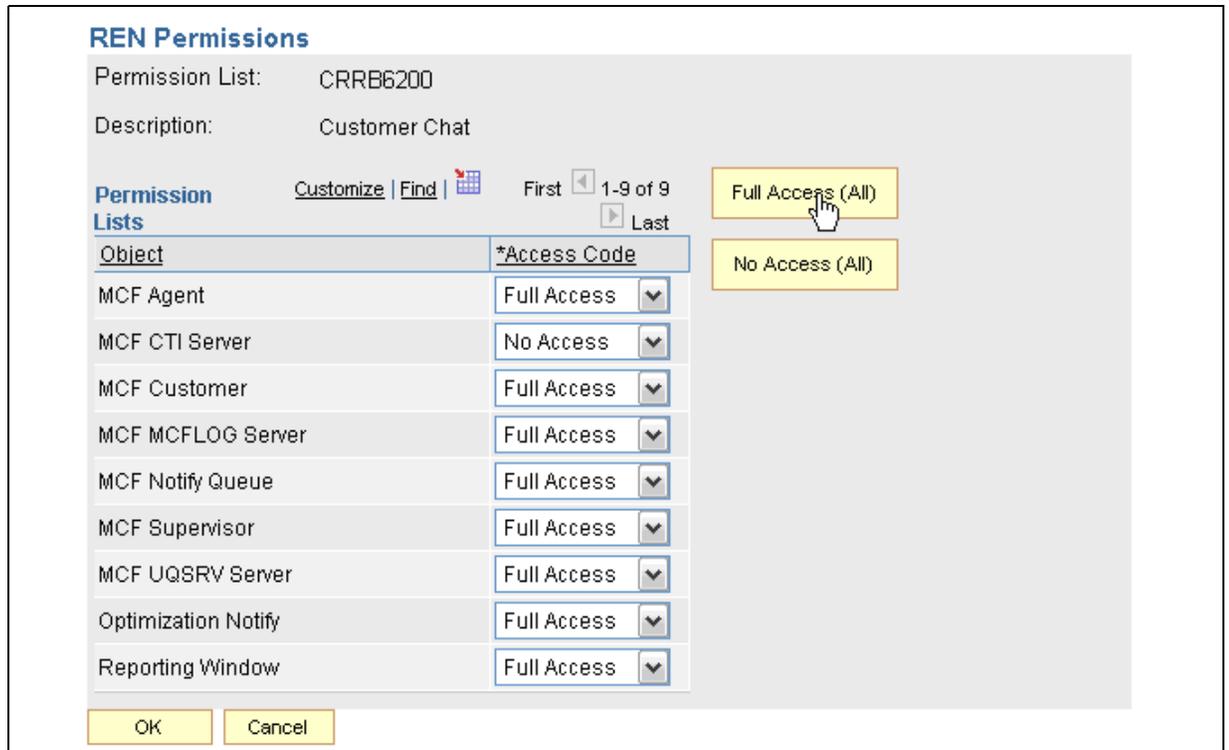
REN Permissions page

6. Click OK on this page.

7. Click Save to save your changes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-22: Updating the Portal Options Data

In this step you update the PeopleTools Portal Options data.

Note. Only perform this step if your upgraded database is on PeopleTools 8.46 or greater.

This step sets the portal options prefix and Owner ID. These values are used when creating Pagelet Wizard definitions and Navigation Collection objects.

To set the Portal Options Prefix and Owner ID:

1. From your browser, sign on to your New Copy of Production database.

2. Select PeopleTools, Portal, Portal Utilities, System Options.

3. Update the value for the Registry Object Prefix with a 1- to 4-character prefix that is unique to your organization.

> **Note.** Do *not* use PAPP, PAPX, PAPQ, PAPI, PRTL, EO, or PT. Do *not* use any product line specific prefix (such as CR, HC, EP, or CI). Do *not* use a blank value.

4. Enter the Owner ID value with your organization's specific owner ID.

> **Note.** The Owner ID is a translate value on the PeopleTools field OBJECTOWNERID. Do *not* use any delivered product Owner ID. If you do not have an Owner ID, then either create one, or leave the Owner ID value as a blank space.

5. Click Save.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	All	All

Task 5-23: Completing Data Setup for CRM

To determine the appropriate setup of any application or transaction data, you must first refer to the PeopleTools PeopleBook and the Setup Manager documentation, for your current release. The setup manager documentation will assist in guiding you through the process flow, however, the specific details of what you will need to set up and how you will go about performing the required setup activities can be found in the specific feature documentation in your PeopleBooks.

See Enterprise PeopleTools: PeopleBook Setup Manager, for your current release.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-24: Stamping the Database

In this step, you set the database to the release level of the Demo database. The values that you enter here appear whenever you view the Help, About PeopleTools dialog.

To stamp the database:

1. Launch Application Designer on your Copy of Production database using the new PeopleSoft release.

2. Select Tools, Upgrade, Stamp Database.

3. Fill in all three of the PeopleSoft Release fields with the appropriate value for your product line and release number:

CRM 9.00

4. In the Service Pack field, enter *0*.

5. Click Stamp.

6. Close Application Designer.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-25: Reviewing Change Control

Earlier in the upgrade process, in the beginning of the chapter "Apply PeopleTools Changes," the Change Control feature was disabled. In this step, you re-enable Change Control, if your site uses this functionality.

To turn on Change Control:

1. Sign on to the Target database using Application Designer.

2. Select Tools, Change Control, Administrator.

    The following dialog box appears:
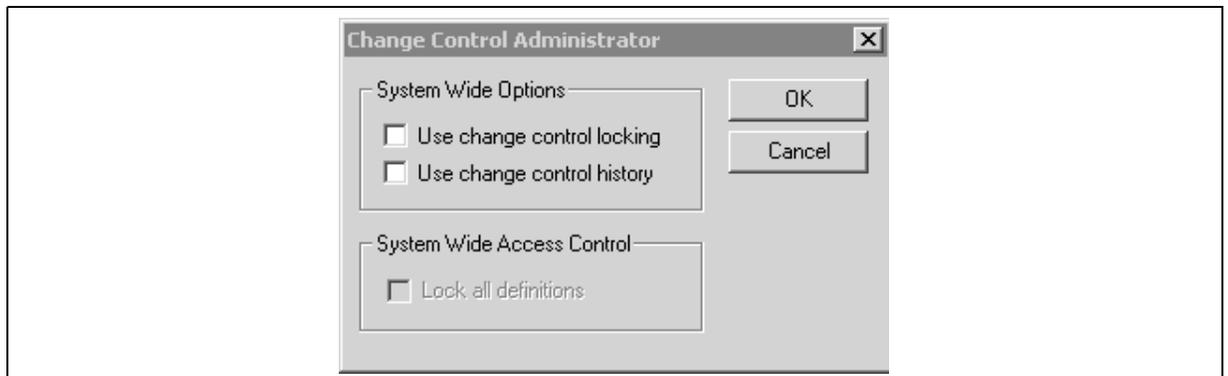
Change Control Administrator dialog box

3. Set Use change control locking and Use change control history according to your site specifications.

Note. Move to Production: The Change Control feature slows down copy functions. The large copy projects are only executed during the initial pass, and the feature is only disabled during the initial pass. If you enable the feature at this point, it will remain enabled during future test Move to Production passes.

See "Apply PeopleTools Changes," Turning Off Change Control.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	All	All

Task 5-26: Backing Up Before Testing

Back up your Copy of Production database now. This enables you to restart your upgrade from this point, should you experience any database integrity problems during the remaining tasks in the upgrade process.

See Appendix: "Planning for Upgrade Testing."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 5-27: Testing Your Copy of Production

In this task, you test your Copy of Production. Testing your Copy of Production will ensure that you can still operate your day-to-day processes on your new release. After you have reviewed your DDDAUDIT and SYSAUDIT, verify that the system is working properly by reviewing the system online. After you are comfortable that the system is working properly, you can perform the Test Move to Production upgrade pass.

See Appendix: "Planning for Upgrade Testing."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

CHAPTER 6

Apply Changes to Production Database

This chapter discusses:

- Understanding the Move to Production
- Testing the Move to Production
- Testing Once More
- Performing the Move to Production
- Completing the Upgrade Survey

Understanding the Move to Production

Once you complete all of the necessary tasks to launch your system into production, you are ready to begin your Test Move to Production passes or to move your system into production.

Task 6-1: Testing the Move to Production

This section discusses:

- Understanding the Move to Production Test
- Understand Move to Production
- Creating a New Change Assistant Job

Understanding the Move to Production Test

Everything you have done to this point is the initial pass of the upgrade process. Now you are ready to start the Test Move to Production pass. The initial pass is very time consuming and requires a lot of analysis at different steps of the process and to troubleshoot issues. The Test Move to Production pass is a different series of steps, which includes a subset of the previous tasks, and takes advantage of the tasks performed during the first upgrade pass.

You should perform as many test moves to production as necessary to work out any issues and to be comfortable with the process. During each Test Move to Production you will be able to refine the process so that you can save time and avoid manual processes. These test passes will also let you know how long the process takes so you can plan your production downtime for your move to production weekend.

Task 6-1-1: Understand Move to Production

The following text is a high level view of what you will be doing in the Move to Production test pass. The remaining steps in this task will prepare your test environment. For example, you may need to move some scripts generated in the initial pass to a new Change Assistant staging directory. Next you will create a new Change Assistant job, setting the Type of Upgrade to Move to Production. That will give you a job with steps filtered with only those steps that apply to the Move to Production (MTP) test pass. From that point forward, you will simply follow the steps as they exist in your new job.

One of those first steps will be to take a Copy of Production. This second Copy of Production is sometimes referred to as the "New Copy of Production." The first Copy of Production, or "old" Copy of Production, will now be the Source database (it was the Target database in the initial test pass). The New Copy of Production is now the Target database.

The steps executed in the MTP pass vary in several ways. Many of the tasks and steps in the initial test pass will be replaced in the MTP pass with Data Mover export and import scripts. In the initial pass, some steps required you to make functional decisions and take time to manually set up data. That data can be copied from the first database to the next, saving you setup time and eliminating the chance for manual error or typos.

Also, the MTP pass does not repeat the database compare/copy steps. You made the decisions once; there is no need to repeat these steps. Instead, a Data Mover script, MVPRDEXP, will export all the tables that contain the PeopleTools objects like records and PeopleCode from the first database. Another Data Mover script, MVPRDIMP, will import those tables into the second database. Anything you have done to PeopleTools objects while executing or testing the first pass—copied objects from DMO, reapplied customizations, applied updates from the PeopleSoft Customer Connection website—will be moved to the second Copy of Production with these scripts.

Another important difference with the MTP pass is the handling of SQL scripts that create and alter tables. In the initial pass, you generated the SQL scripts, sometimes edited the SQL script, and then executed the SQL scripts. In the MTP pass, you may be able to skip the generation steps and use the SQL you previously generated. This is another way to save time in your critical go-live window and is the ultimate goal, but it is an incremental process to get to that point.

In the first MTP pass, everyone must regenerate the SQL. There are small differences between the initial and MTP passes that require the SQL to be regenerated in at least one MTP pass. The Change Assistant Templates are delivered with the steps set this way.

In subsequent MTP passes, you may choose to "turn off" the generation steps if possible. If you have not changed any records at the end of one MTP pass, then you can reuse the SQL in your next pass. If you have done anything to change records, you should generate SQL again. This can include things like applying PeopleTools upgrades (for example, 8.47 to 8.48), or applying updates from the PeopleSoft Customer Connection website that involve record changes, or making additional customizations to records.

If you choose to skip some of these steps, do one of the following: mark the step complete in your job, or change the step properties in the template, so the step will never show up in your MTP filtered job again. To change the step properties, double-click on the step to open the Step Properties dialog, and change the Type of Upgrade to Initial Upgrade. In addition, copy the SQL scripts from the previous pass output directory to the new pass output directory. Change Assistant will look for the SQL scripts in the output directory set on the job's Database Configuration, so make sure it will find them when it tries to run them.

The steps that are eligible for this treatment will contain Move To Production documentation notes indicating such.

Note. If you have made any changes to your trees, tree structures, or PS/Query objects since the upgrade began, you may want information on how to preserve those changes.

See Appendix: "Preserving Queries and Tree Objects."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 6-1-2: Creating a New Change Assistant Job

You need to create a new Change Assistant Job for each test Move to Production pass.

To create a new Change Assistant job:

1. Oracle recommends that you use new output and stage directories for each new test pass. Create those directories now.

2. From Change Assistant, select Tools, Options and specify the new output and staging directories on the Change Assistant Options page.

3. Select File, Open Environment and select the environment.

4. Review the configuration on the General Settings window.

    The Database Type, Language and SQL Query Executable will be the same as your previous job. Make changes to the PS_HOME settings, if necessary, and select Next.

5. Specify the Source Database setup information and click Next.

    This is the Copy of Production database from your previous pass.

6. Specify the Target Database setup in formation and click Next.

    This is the new Copy of Production database.

7. Review the environment configuration on the Confirm Selections window and click Next to save the changes to the environment.

8. Select File, New Job.

9. Select the template on the Use Template window and click OK.

10. On the Type of Upgrade window, select Move to Production.

11. Click OK.

    A new upgrade job using the naming convention of *Template_Environment_*Move to Production is created.

12. Highlight the job name and select Edit, Set Documentation Directory, then select the directory where the documentation is located and click OK.

    If you have been using documentation printed from the filtered view on the jobs, print the documentation again. The steps for Move to Production are different than in the initial pass.

13. Select View, Documentation.

14. Select View, Expand All to display all the steps in the job that apply to your upgrade.

    The job will contain steps that were not in the initial upgrade pass and will exclude some steps that were in the initial upgrade pass based on the step properties.

Now you are ready to run the job.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 6-2: Testing Once More

As in any implementation project, you must consider planning, resources, development, and training. Testing also needs to be an integral part of your implementation project. Testing your database once more, after you have completed the upgrade, ensures that you can still operate your day-to-day processes on your new PeopleSoft release.

The level of testing in this task will focus primarily on the strategies to employ before moving into production.

See Appendix: "Planning for Upgrade Testing."

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	All	All

Task 6-3: Performing the Move to Production

When you are ready, you can move the system into production. Take your system out of production and perform all of the steps involved in testing the Move to Production against your production database.

See Testing the Move to Production.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	All	All

Task 6-4: Completing the Upgrade Survey

We are interested in feedback on your upgrade experience and any thoughts and/or suggestions you have on how we can improve the process in the future. Note that this survey should only be accessed once you have completed your upgrade and are in production on the new release.

See Also

http://www.peoplesoft.com/go/upgradesurvey

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	All	All	All

CHAPTER 7

Appendices

Understanding Appendices

The appendices portion of this documentation contains information you may need for your upgrade. The appendices have been referenced throughout the upgrade documentation for further understanding of the upgrade you are performing. PeopleSoft recommends that you read each appendix as it is referenced in the documentation.

APPENDIX A

Applying Fixes Required for Upgrade

This appendix discusses:

- Preparing to Apply Fixes
- Applying Fixes During Installation
- Applying Fixes After Copying Project
- Applying Fixes After Data Conversion
- Applying Fixes Between Upgrade Passes
- Applying Fixes in Move to Production

Task A-1: Preparing to Apply Fixes

This appendix gives general instructions for applying a Required for Upgrade fix for your upgrade. If the directions given in a particular fix are different from those given here, then follow the instructions in the fix.

It is important that you run your upgrade using the latest versions of all upgrade software. In Customer Connection, check the upgrade page and the Updates and Fixes page to ensure that you have all of the latest code.

Ideally, you should follow the steps below to apply the various files and fixes.

To apply files and fixes:

1. Install the new release from the CD.

2. Apply any additional scripts and projects from the Customer Connection upgrade page to your new release codeline (and to the New Release Demo database, if applicable).

3. Apply any other Required for Upgrade fixes from Customer Connection's Updates and Fixes to your new release codeline (and to the New Release Demo database, if applicable).

4. Run your initial pass of the upgrade.

5. Before you begin each subsequent upgrade pass, check the upgrade page for new versions of any files you previously applied.

   Then check Updates and Fixes for any new Required for Upgrade fixes.

Your initial upgrade pass will differ from your subsequent Test Move to Production passes. Some of the upgrade tasks and steps are common to both the initial upgrade pass and the Move to Production pass. For this reason, you may find Required for Upgrade fixes that do not apply to the upgrade pass that you are currently performing. The details provided with each fix will help you determine whether to apply the fix and when to apply it. The fix will also tell you what to do if you have already passed the step for which the fix is needed.

How you apply a fix depends on where you are in the upgrade process. This appendix explains how to apply a typical fix, and is organized by the various points within the upgrade where you will apply fixes.

Task A-2: Applying Fixes During Installation

In the chapter, "Install the Software," of *Getting Started on Your PeopleSoft Upgrade,* you should first download and apply all files and objects from the upgrade page on PeopleSoft Customer Connection. Then you must download all Required for Upgrade fixes from Updates and Fixes on PeopleSoft Customer Connection. You can use the instructions in this section to apply any additional fixes that are posted, until you reach the task, "Running New Release Compare Reports."

If a fix contains a project that needs to be copied from a file, apply it to your New Release Demo database during installation. If the project contains changes for records or fields, those objects will be updated during the normal compare and copy steps in the upgrade. You will not have to build objects in the project separately or consider whether it will have an impact on customizations. You will do that with the rest of the objects during the upgrade. Apply as many of the fixes as you can at this time.

To apply script fixes during installation:

1. Download Required for Upgrade change packages using the "Download Change Package" functionality in Change Assistant.

2. Use Change Assistant to apply the updates into your New Release Demo database.

    Review the documentation included with each update prior to applying each update. There may be manual steps that need to be performed in order to successfully apply the update.

See the Enterprise PeopleTools PeopleBook: PeopleSoft Software Updates for your current release, "Applying Updates."

Task A-3: Applying Fixes After Copying Project

It is best not to apply fixes during the compare and copy tasks in the "Run and Review Compare Reports" and "Apply Application Changes" chapters of the initial upgrade pass. It can also be cumbersome to apply record and field changes during the creating and altering of tables in the "Complete Database Changes" chapter. It is, therefore, best to wait until just before the "Running Data Conversions" task in the "Apply Application Changes" chapter to apply additional fixes. Most of the fixed objects will be data conversion code, delivered in projects.

To apply PeopleSoft project fixes before data conversion:

1. Download Required for Upgrade change packages using the "Download Change Package" functionality in Change Assistant.

2. Use Change Assistant to apply the updates into your New Release Demo database for this upgrade pass.

    Review the documentation included with each update prior to applying each update.

    See the Enterprise PeopleTools PeopleBook: PeopleSoft Software Updates for your current release, "Applying Updates."

3. The project is now loaded on your New Release Demo database. You should run a project compare to make sure that the objects in the fix will not overwrite any of your customizations.

If you find customizations, you must decide how to deal with them before you copy the fix to your Copy of Production.

4. If you are performing a Move to Production upgrade pass, first migrate the change packages into the Source database for this upgrade pass.

   If needed, first set up Change Assistant with the environment information for your Source database. If you customized any of the objects delivered in the change package, you should repackage the fix to include your customizations. If you did not customize any objects delivered in the fix you may directly apply them to your Source database.

   See the Enterprise PeopleTools PeopleBook: PeopleSoft Software Updates for your current release, "Applying Updates."

5. Migrate the change packages into the Target database for this upgrade pass.

   If needed, first set up Change Assistant with the environment information for your Target database.

Task A-4: Applying Fixes After Data Conversion

At this point, you have already converted all of your data for the upgrade pass, and you cannot apply Application Engine program fixes and use them in this upgrade pass. You should refer to the fix instructions to determine what to do in each case. Often, the instructions say that you need to restore your database from a pre-conversion backup and rerun data conversion to get the benefits of the fix. Because this is the only way you can get the fix onto your current Copy of Production, you may decide to allow the error and not apply the fix until you do a Test Move to Production. Then after you have completed that test pass, you can test the affected function. However, you should not do this if your next pass is your final Move to Production, and you are going into production with the resulting database. You should always test your upgraded database between test passes if changes have been made to procedures, scripts, or programs. You do not want any surprises during the final Move to Production.

Task A-5: Applying Fixes Between Upgrade Passes

You can apply fixes just before you start a Test Move to Production pass in the same way you would in the step above, Apply Fixes After Copying Project. In those instructions, you apply the fix to your New Release Demo database and compare it to the Copy of Production. Make sure that you do the database comparison in order to verify that the fix does not wipe out any customizations you made to Application Engine programs during your initial upgrade pass. If you have made customizations, merge your customizations into the new Application Engine code on the New Release Demo database. Then apply the fix to your Copy of Production, which you will use as the Source database in the Test Move to Production. The fix will then get moved to your New Copy of Production when you run the MVPRDEXP.DMS and MVPRDIMP.DMS scripts in the "Apply PeopleTools Changes" chapter.

Task A-6: Applying Fixes in Move to Production

Once you have started a Test Move to Production, do not apply any fixes until just before data conversion. Apply any fixes using the previous step, "Applying Fixes After Copying Project." In those instructions you apply the fix to your New Release Demo database and compare it to your Copy of Production. Instead of using the original Copy of Production as the Target, you must now use your New Copy of Production, the one defined as the Target in your Move to Production Change Assistant job. Be sure to do the database comparison to verify that the fix does not wipe out any customizations that you made to Application Engine programs during your initial upgrade pass. If you have made customizations, merge your customizations into the new Application Engine code on the New Release Demo database, then copy the project to your New Copy of Production.

APPENDIX B

Changing the User Interface

This appendix discusses:

- Change the User Interface
- Change the User Interface for Mobile

Task B-1: Change the User Interface

Three user interface options were delivered with your current release of PeopleSoft 8.x. The classic style, the style seen in previous releases of your PeopleSoft application, is set as your default style. The following are examples of the three delivered styles: classic, light blue, and dark blue.

The classic style, shown below, is set as your default style delivered with your PeopleSoft release.
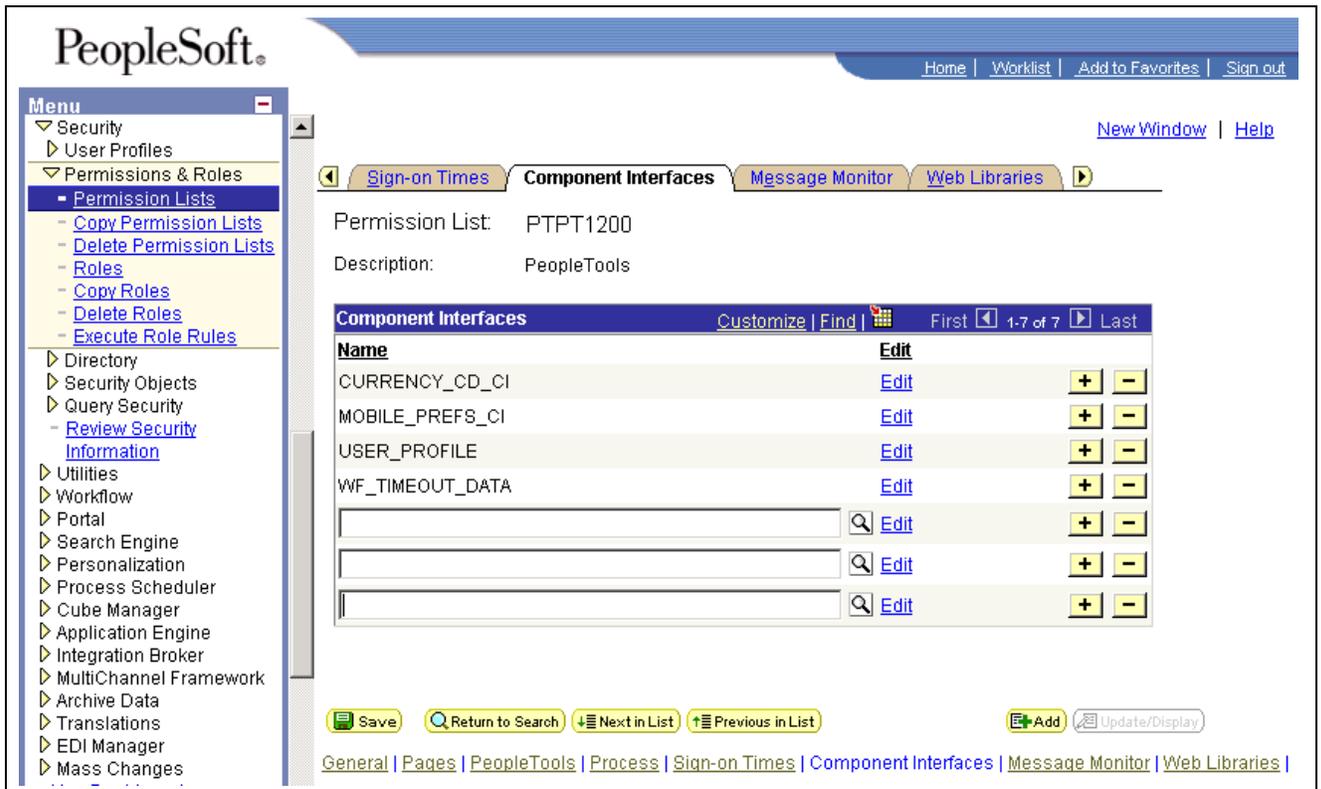
The classic style user interface option

The following example represents the light blue style.
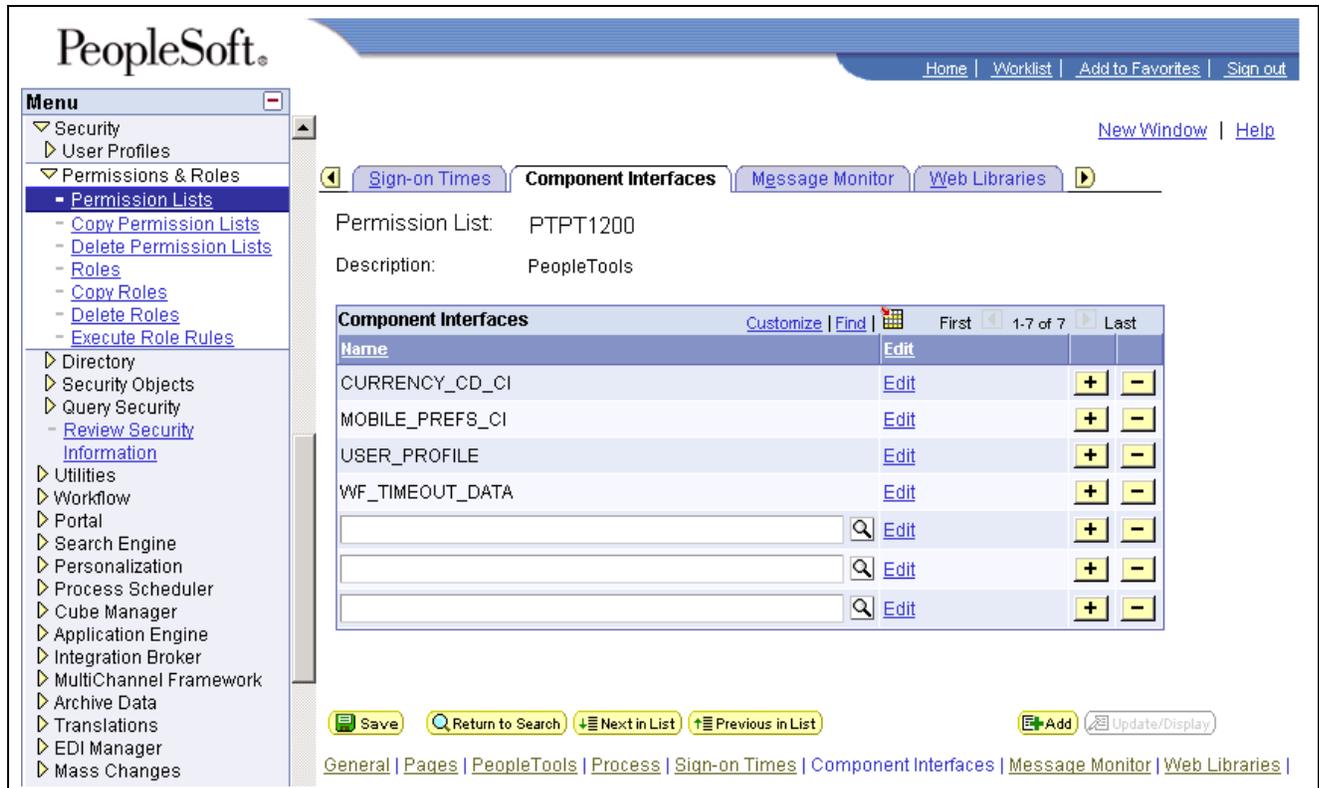
The light blue style user interface option

This example represents the dark blue style.
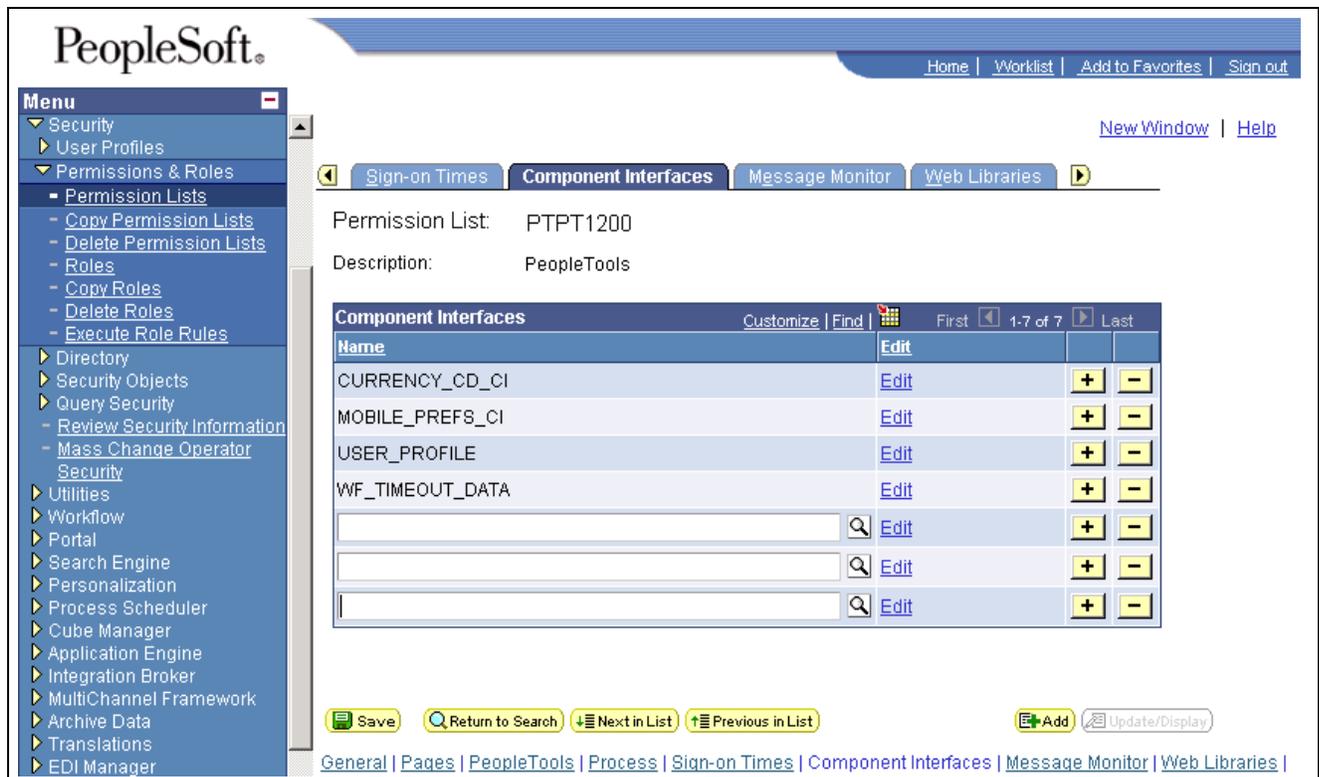
The dark blue style user interface option

See the Enterprise PeopleTools PeopleBook: PeopleSoft Application Designer for your new release.

To change your styles, you must delete the substyle sheets associated with the classic style and replace them with either the light or dark blue substyle sheet.

Note. The new user interface looks are supported by Internet Explorer release 5 and above and Netscape Navigator release 6 and above. If using a browser and release other than these, the system defaults to the classic style.

To enable one of the new user interface looks:

1. In Application Designer, open the stylesheet PSSTYLEDEF.

2. Select the PSALTERNATE Sub Style Sheet, and click Delete.

3. Select Insert, Insert Sub Style Sheet.

4. Select PSALTERNATE_LIGHTBLUE or PSALTERNATE_DARKBLUE.

5. Repeat steps 1 through 4 for the PTSTYLEDEF and PSACE Sub Style Sheets, making sure to use the same extension (_LIGHTBLUE or _DARKBLUE) as you did for PSALTERNATE.

6. Select Save.

7. Open the stylesheet PSQUERYSTYLEDEF.

8. Select the PTQUERYSTYLESUB Sub Style Sheet, and click Delete.

9. Select Insert, Insert Sub Style Sheet.

10. Select PTQUERYSTYLESUB_LIGHTBLUE or PTQUERYSTYLESUB_DARKBLUE.

    Use the same extension as you did in Step 4.

11. Click Save.

Task B-2: Change the User Interface for Mobile

You use related content projects to synchronize extraneous PeopleSoft PeopleTools objects to a mobile device. In particular, you can use a related content project to synchronize a new or customized stylesheet to the mobile device. Related content projects are associated with a component interface. Oracle recommends that you associate a given related content project with a synchronizable component interface that is common to your mobile application.

To change the user interface look for mobile applications:

1. Follow the procedure in the previous task, "Change the User Interface," to add the new or customized stylesheet to a PeopleTools project.

2. In Application Designer, open a synchronizable component interface that is common to your mobile application.

3. Open the Properties dialog box from the pop-up menu.

4. Select the Synchronization tab.
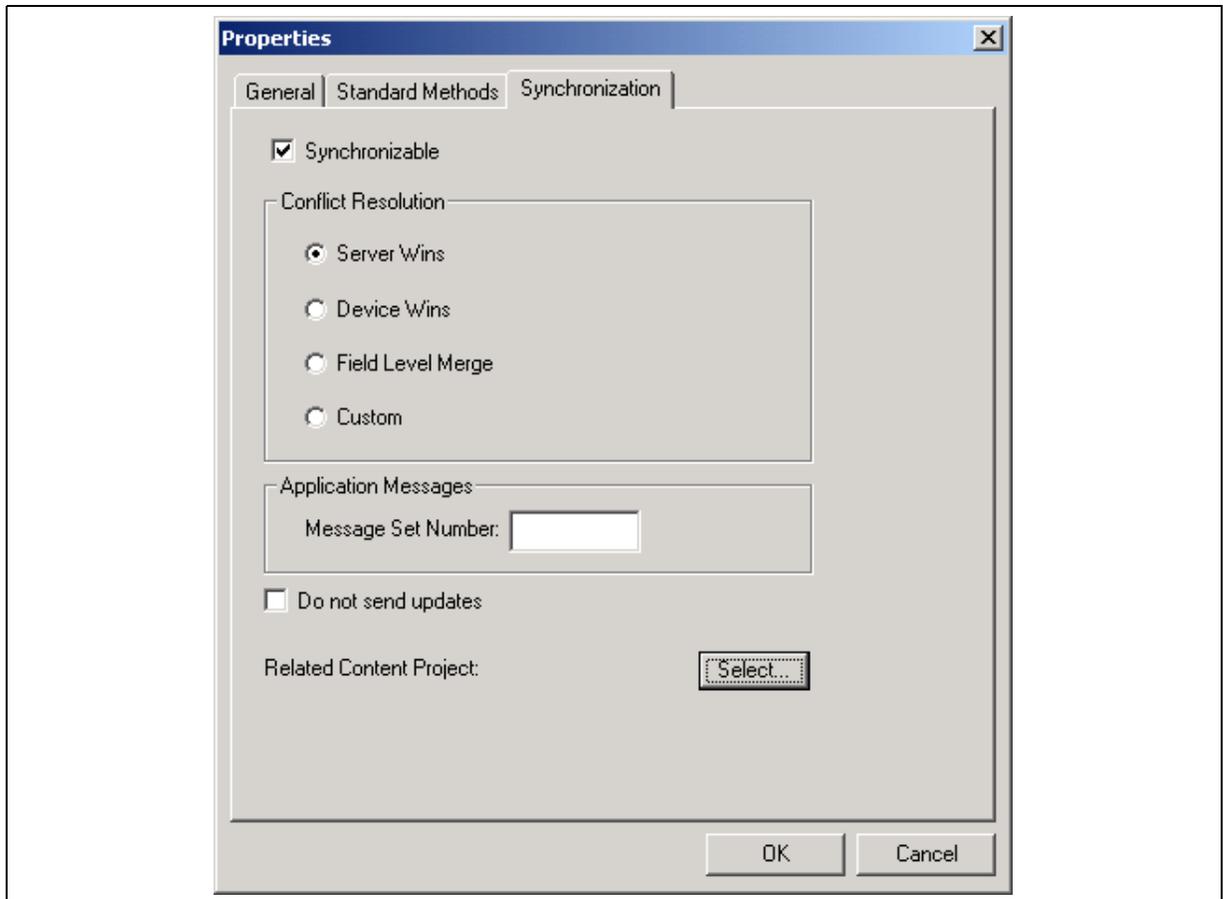
Properties dialog box: Synchronization tab

5. Click Select at the Related Content Project field.

6. Find and highlight the desired project and click Select.

7. Click OK.

    The stylesheet will be synchronized to the mobile device during the next bootstrap or update applications synchronization.

See the Enterprise PeopleTools PeopleBook: PeopleSoft Component Interfaces for your new release.

See the Enterprise PeopleTools PeopleBook: PeopleSoft Mobile Agent for your new release.

APPENDIX C

Improving Performance

This appendix discusses:

- Understanding Performance Improvement

- Planning Your Upgrade for Performance

- Performing the Upgrade

- Improving Performance for Your Platform

- Consulting the Global Support Center

Understanding Performance Improvement

Performance is always a challenge when you are upgrading. Much of the data currently in your database will be affected. No other batch processing works quite like it. Upgrade performance is sensitive to your unique environment and data. These performance recommendations are designed to help you improve performance during your upgrade.

Task C-1: Planning Your Upgrade for Performance

Review the following guidelines to help plan for better upgrade performance:

- Provide as much hardware, memory, and disk space as you can.

- Run long processes on a dedicated server, not the client. Configure that server similarly to your production environment.

- Size the Copy of Production database (Target) like your production database — allow for growth.

- Use a dedicated workstation, configured like the production environment.

- Provide an application server and process scheduler for the Target database on the new PeopleSoft release.

- Look for fragmented tables. Resize or reorganize the initial and next extends accordingly.

- Know which tables are your largest. This information will be valuable during the upgrade.

Task C-2: Performing the Upgrade

This section discusses:

- Verifying the Database Structure Task
- Creating and Altering SQL Scripts
- Performing Data Conversion

Task C-2-1: Verifying the Database Structure Task

When performing the "Modifying the Database Structure" task, perform all recommended update statistics, so the optimizer can make a good decision.

Task C-2-2: Creating and Altering SQL Scripts

The following list provides tips to use when performing the "Modifying the Database Structure" task.

- Perform all recommended update statistics, so the optimizer can make a good decision.

- Look for large tables that are being altered. Create separate scripts for each of these tables and run the script concurrently with your other alter scripts. You can run these concurrently even if you are using the Alter by Rename build option because each table creation uses an independent temporary table name in the new PeopleSoft release (PSY*recname*).

- Run your create table script concurrently with the alter tables without deletes script.

- Some indexes will not create during alter without deletes because of a unique key violation. You can expect this because index structures have changed. The data in these indexes will be corrected during data conversion. You can create the index as a non-unique key for data conversion. Create this non-unique index, without the field that caused the error, so that data conversion does not have to update the index as well as the data pages as it corrects the data in this field.

Task C-2-3: Performing Data Conversion

Oracle delivers the Change Assistant templates to run the steps on the client by default. The server can run Application Engine programs. You may want to run these programs on the server to increase performance. Change Assistant uses the PSEMHUB and PSEMAgent to execute jobs to the server. You will need to configure and start your Environment Management Hub and Agent, enter the Environment Management information into the Change Assistant options, set your Change Assistant mode, select the Perform Server Processing check box, and modify the run location of the steps you wish to run on the server. Consider running data conversion application engine programs concurrently as they were designed with no dependencies between programs. Any exceptions to this are noted in the documentation. If you would like to take advantage of concurrent processing, modify the step properties and set the Run Concurrently option to Yes.

See the Enterprise PeopleTools PeopleBook: PeopleSoft Software Updates for your new release.

Task C-3: Improving Performance for Your Platform

This section discusses:

- Using Oracle

- Using DB2

Task C-3-1: Using Oracle

You should use the cost-based optimizer during the upgrade. The application engine scripts use MetaSQL to run the update statistics command at various times during data conversion. If you are running the rule-based optimizer, you will not take advantage of these statements.

When running the alter scripts, remember the Oracle hint /*APPEND*/. This command will improve the performance of your alter script if you are doing an "Alter by Rename." This hint performs like an Oracle Direct Load Insert and does not capture redo or recovery information. The syntax is as follows:

```
INSERT  /*+ APPEND */  INTO TABLENAME  (FIELD1, FIELD2, ...
```

Make sure your database administrator has turned autoextend on. Autoextend allows tablespaces to grow larger than their set maximum size and will be useful during the upgrade process since tablespaces grow several times larger than they would in production.

Alter the tablespace for PSIMAGE and increase it to 200 MB; autoextend on the next 10 MB; set the maxsize to *unlimited*.

Task C-3-2: Using DB2

Perform all recommended update statistics on the system catalog as well as the application tablespaces.

Interspersed throughout the Application Engine data conversion programs are steps that make a dynamic call for RUNSTATS to be performed against selected tables. An example of how this is used follows:

- Step01 - Start with an empty Temp_Table_TAO.

- Step02 - INSERT 60,000 rows into the Temp_Table_TAO.

- Step03 - Application Engine Step calls %UpdateStats(Temp_Table_TAO).

- Step04 - You can now perform SQL against Temp_Table_TAO using new statistics.

This will allow you to use indexes when processing against Temp_Table_TAO. If DB2 z/OS is not configured correctly, Application Engine programs skip these steps and the performance of the SQL steps that follow will suffer.

In order to take advantage of the %UpdateStats feature, at least one of these conditions must be met:

- You implemented the DSNUTILS stored procedure.

- You followed the enhanced installation path.

See the Enterprise PeopleTools Installation for DB2 UDB for z/OS for your new release.

Note. If you disable the %UpdateStats feature of Application Engine, it will adversely affect the performance of your data conversion programs, because statistics will not update when the tables are loaded with large volumes of data.

Task C-4: Consulting the Global Support Center

If you do have a problem with your upgrade, contact the Global Support Center (GSC). Oracle will be able to give you a solution to the problem faster if you supply the following information:

- Include details about the table row counts and indexes available on the tables involved in the processing:

  - Include indexes in your physical database, not those defined in Application Designer.

  - Mention any additional indexes that you custom-added; they could be getting in the way.

- Include RDBMS (Oracle, SQL Server, or DB2, and so on) and RDBMS release (for example, Oracle 7.3 or 8.16).

- If you are running on Oracle, specify whether you are you running in cost-based or rule-based mode.

- Include the PeopleSoft upgrade path for both PeopleTools and the application.

- Provide trace files: PeopleTools trace and RDBMS-specific trace files, SQL explains, and so on.

APPENDIX D

Planning for Upgrade Testing

This appendix discusses:

- Understanding Testing Techniques
- Deciding When to Test
- Evaluating Your Testing Requirements
- Defining Your Testing Strategy
- Determining the Testing Conditions
- Developing Your Test Plan
- Developing Test Scripts
- Reviewing Tips and Techniques

Understanding Testing Techniques

As with any project, testing is a critical part of your upgrade project. With proper testing, you can ensure that you upgrade successfully and you are ready for your Move to Production.

Upgrades vary in complexity and scale from release to release and customer to customer, so the testing periods and the activities required to perform testing vary from upgrade to upgrade. Because PeopleSoft cannot anticipate how every organization uses the system to fit their own business practices, including customizations and data setup, PeopleSoft does not deliver upgrade test scripts. However, there are some general testing guidelines that you can follow to assist with your upgrade testing. In this section, you will find information that will help you plan your testing efforts.

Task D-1: Deciding When to Test

An effective testing strategy involves an understanding of the stages of a PeopleSoft upgrade and where, within these stages, testing should be performed. You can take more than one approach and use more than one method to test your upgrade.

Task D-2: Evaluating Your Testing Requirements

To evaluate your testing requirements, you need the following information:

- The number of products and modules you currently have in your production database.

- The number of customizations you have in your production database.

- The functional design and business requirements addressed by each customization.

- Your online, batch, and reporting business processes that you want to include in testing.

Task D-3: Defining Your Testing Strategy

This section discusses:

- Understanding Your Testing Strategy

- Evaluating Unit Testing

- Evaluating System Testing

- Evaluating Integration Testing

- Evaluating Parallel Testing

- Evaluating Performance Testing

- Evaluating User Acceptance Testing

- Evaluating Regression Testing

Understanding Your Testing Strategy

Once you evaluate your testing requirements, you can determine what types of testing you need. You should define the tests to be performed for the project and the goals of each test—including roles and responsibilities, test-case management, control points, and success criteria. In addition, you should define and document the scope of each type of testing. Use the definitions below to determine the levels of testing required in your organization.

To ensure upgrade success, be sure to train upgrade members before the upgrade. It is critical to have educated testers to ensure adequate test coverage of new functionality.

The testing types below do not necessarily run systematically, one after another. Different test conditions can sometimes run in parallel.

Important! It is important to test not only your customizations and changes in your new release but also your standard business practices. By doing this you ensure that your normal business practices have not been altered by the new release and/or your customizations.

Task D-3-1: Evaluating Unit Testing

In this stage of testing, you have completed your upgrade tasks and your database is now at the new release level. However, you should unit test before you use the new system. Unit testing validates data, business rules, and business process requirements. In addition, it ensures that business processes work as designed and your database is ready for full functionality testing. The processes for performing unit testing are described below:

- Test individual online transactions and batch processes on the upgraded database.
- Validate data converted during the upgrade.
- Verify that you can access existing data and enter new data successfully.
- Test customizations reapplied to the upgraded database.
- Each customization is tested individually along with all related processes.
- Business processes are not tested.
- Test scripts are not required.
- Test − Document − Resolve issues − Retest.

Task D-3-2: Evaluating System Testing

System testing ensures that all business functions and processes execute appropriately from the customer's view. Business processes are tested from beginning to end during system testing; this is sometimes referred to as end-to-end testing. The processes for performing system testing are described below:

- Create system test environment via a test Move to Production.
- Test inbound and outbound interfaces and related business processes.
- Test online business processes using relevant security (that is, user IDs, roles, and permission lists).
- Test batch business processes.
- Test reporting processes (SQR, PS/Query, nVision, and Crystal).
- Test customizations to business processes.
- Perform using test scripts.
- Compare expected results to actual results.
- Test − Document − Resolve issues − Retest − Document − Sign off.

Task D-3-3: Evaluating Integration Testing

After system testing, you perform integration testing. In this stage, you test business processes and groups of related business processes within the application to determine that they function as designed. In addition, you ensure that any design flaws are resolved before user testing. The following list of activities describes integration testing:

- Create integration test environment via a test Move to Production.
- Test specific business processes.
- Test integration between modules and business processes.
- Perform using test scripts.
- Compare expected results to actual results.

• Test − Document − Resolve issues − Retest − Document − Sign off.

Task D-3-4: Evaluating Parallel Testing

Parallel testing validates that the current production system and the upgraded database generate the expected results for specific business events. Parallel testing is optional, but frequently used to ensure that the new release will generate the same results given the same testing scenarios. The processes for performing parallel testing are described below:

• Create a parallel test environment via a test Move to Production.

  The Copy of Production should be taken before the major business processes/events are executed so that the same processes can be run during the parallel test.

• Retain any output from production processes for later comparison.

• Run the same business processes/events in the upgraded database.

• Compare results generated in the production system with the results generated using the upgraded database.

• Perform using test scripts.

• Test − Document − Resolve issues − Retest − Document − Sign off.

Task D-3-5: Evaluating Performance Testing

You conduct performance testing to determine if the system can accomplish stated objectives within a specified time period. Performance of the current production system is often used as a baseline. The processes for performing performance testing are described below:

• Define performance objectives for each business process included in the scope of the test.

• Perform business process.

• Monitor performance.

• Compare actual performance and acceptance criteria.

• Perform using test scripts.

• Test − Document − Resolve issues − Retest − Document − Sign off.

Task D-3-6: Evaluating User Acceptance Testing

User acceptance testing determines if day-to-day users can complete daily work activities within the system with an acceptable level of effort. For example, run through business processes such as hiring, terminating, and paying an employee in Human Resources or creating, editing, and posting journals in Financials. The processes for performing user acceptance testing are described below:

• Functional resources should execute test scenarios (with their appropriate production security access to ensure they have access to all the components, pages, and processes used in their daily functions).

• Perform using test scripts.

• User testing should not be performed with developer or Super User access.

• Test − Document − Resolve issues − Retest − Test − Document − Sign off.

Task D-3-7: Evaluating Regression Testing

You perform regression, or re-testing, if problems were found and resolved or changes were made during any of the previous tests. This stage of testing validates the test Move to Production and Move to Production parts of the upgrade. When all the tests have received sign-off, you will use the initial Copy of Production to upgrade the production database/environment. You then perform a test move into the production environment and customers confirm that the test move executed successfully. At this point you conduct regression testing. The following tips will assist you with regression testing:

- Ensure that no new defects have been introduced during the move.

- Execute a predefined set of scripts to confirm the test move.

- Performed by Functional Resources before *Go Live*.

- Rerun scripts from previous testing.

Task D-4: Determining the Testing Conditions

After you identify the types of testing to include in your upgrade, determine conditions for each stage of testing. Be sure to test the actual test Move to Production to resolve any technical issues in the upgrade process itself in addition to performing functional application testing. Perform the following actions for each testing type:

- Determine criteria for successful completion.

- Determine which tests you can run concurrently and which you must run serially.

- Set up test plans and test scripts you will need.

- Define the testing environment.

- Define issue resolution procedures.

- Define change control and migration procedures.

- Define which third-party tools you must install and configure.

- Identify database maintenance procedures, for example, backup and refresh.

- Evaluate the need for a testing tool to aid in the testing process.

Task D-5: Developing Your Test Plan

If you have test plans from your implementation or previous upgrades, consider modifying them for this upgrade project, ensuring that you incorporate features and functions delivered with the new release. Use existing test plans and scripts wherever possible. Identify modifications during the fit/gap analysis and complete script generation during the initial upgrade. Based on the objectives and scope defined in your testing strategy, identify the following items for each type of testing:

- Test procedures

- Assumptions

- Timing

- Deliverables

- Acceptance criteria
- Roles and responsibilities
- Resource requirements
- Training requirements
- Test environment
- Data requirements
- Issue and change control tracking procedures
- Testing Tools

Task D-6: Developing Test Scripts

The process of developing test scripts can assist with detecting problems in the requirements or design of an application. It requires thinking through the entire operation of the application. For this reason, you may find it useful to start preparing test scripts early in the upgrade cycle and, if possible, base them on existing test scripts from your implementation project or previous upgrade.

If you have test scripts from your original implementation, recycle them and modify them to accommodate new functionality. That way, you can be sure to cover your critical end-to-end business processes. You will also want to focus additional testing time on your customizations to verify that they have upgraded successfully.

If you do not have test scripts from your implementation, you can create them by documenting what you currently do within the system.

Create a test script for each business process to define the Action or Event, Input, and the expected result to determine if a feature of an application is working correctly. Functional people who are aware of current processes should write your test scripts. However, when writing test scripts, assume the person testing does not know how to use the system. Use the following procedure for developing test scripts:

- Test scripts should contain specifics, such as test identifier, test name, objective, test conditions and setup, input data requirements, steps, and expected results.
- Write as a step-by-step guide, stating what data should be entered, when, and where.
- Organize by module, business process, and process cycles.
- Create with full production security in mind.
- Create early in the upgrade process.

Make sure that your tests are consistent with the following tips:

- Action
  - Include the script name, description, and purpose.
  - Include the navigation steps within the PeopleSoft system.
  - Include navigation steps outside the PeopleSoft system.
- Input
  - Include security requirements: what User ID, Role, and Permission List should be used to perform the test.

- Specify key data elements: entering new or accessing existing data.
- Results
  - Include the exact results.
  - Print screens to support the results and print the report output.

Task D-7: Reviewing Tips and Techniques

This section discusses:

- Reducing the Time of Upgrade Process
- Performing Security Testing
- Performing Testing on Up to Date Data
- Performing Test Move to Production
- Tracking Issues
- Reviewing Testing Tools
- Discussing Change Control
- Discussing Back Up Procedures
- Evaluating Unexpected Results
- Evaluating Reasons for Failure

Task D-7-1: Reducing the Time of Upgrade Process

All testing can be performed at the end, including running the tests on the current system to obtain results for comparison. One way to reduce the overall timeframe of an upgrade is to execute the tests on the current system while the upgrade is in progress. This way you will have the results ready when the upgraded database is to be tested. This can be achieved by taking two copies of the production database at the start of the upgrade. Only one copy is upgraded, while the other remains at current release. The testing time is now reduced to only performing the tests on one database.

After each test Move to Production, you may want to turn over the upgraded database to the testing team while the technical team begins a new iteration of the test Move to Production. Conducting the two efforts in parallel may decrease the overall time required to upgrade. Any issues that are found by the testing team can be incorporated into the newly upgraded database as soon as it is available.

One approach that may be used for the Move to Production is to run the production database and upgraded database in parallel to ensure that key business processes operate as expected. Although this may require dual maintenance of data during the parallel testing period, it may minimize the impact of the actual Move to Production. If you are interested in using this method, once you have performed a test Move to Production to your satisfaction, schedule the production cutover weekend. Then, perform the next test Move to Production during that weekend. Bring the existing production system back up and run the upgraded database concurrently. If, after comparing the outcome of your critical business processes, you are satisfied with the results, simply set the upgraded database to your production system. If you are not satisfied with the results, make the necessary adjustments and perform another test Move to Production.

Task D-7-2: Performing Security Testing

It is very important that you test security on each test pass you complete. Security is a vital part of the upgrade process and if it is not tested properly before you go live with your new release, there is a great potential for failure.

Task D-7-3: Performing Testing on Up to Date Data

The previous technique will mean that testing is performed on *old* data. The copies of production may have been taken some weeks or months in the past. It will confirm that the data you started with has upgraded successfully. However, it may be required to perform the tests on the most recent data set as follows:

- Take a copy of production and upgrade

- Perform all phases of testing on the upgrade version up to unit testing

- Determine that the database is ready for full functionality testing

Task D-7-4: Performing Test Move to Production

Performing a test Move to Production is a good technique for assuring database readiness as follows:

- Take two up to date copies of the production database.

- Perform the test Move to Production steps to upgrade one of the databases.

- Execute test scripts on the remaining database.

- Perform tests on the upgraded database and compare results.

Task D-7-5: Tracking Issues

You should implement a method for tracking the tests and issues discovered during testing. Tracking issues and resolutions on a central document serves as a communication tool and minimizes duplication effort. The following tips should be considered while tracking issues:

- Categorize issues:

  Critical, Major, Minor, Cosmetic

- Use a central document repository or tracking tool

Task D-7-6: Reviewing Testing Tools

SQA Robot :

- Records key strokes (like a macro recorder) into Visual Basic scripts.

- Useful for regression testing.

- SQA Manager—can be used to simulate multiple users.

Test Director by Mercury/Interactive:

- Tool that manages test scripts—tracks execution and defects.

- Useful for regression testing.

Task D-7-7: Discussing Change Control

Make sure that you have a procedure for implementing changes during the testing stage. You may have several databases, if server space permits. All changes should be made in a master database. If an issue is found during testing, the resolution should be applied to the master database and promoted via pre-defined migration procedures. Remember that a master database will also be required to perform the Move to Production.

Task D-7-8: Discussing Back Up Procedures

The following tips should be considered when backing up your data:

- Back up at baseline before testing (use a backup technique that will allow you to restore individual tables).

- Back up at key points for point in time testing.

- Implement refresh procedures to avoid duplicate data.

Task D-7-9: Evaluating Unexpected Results

In the event you receive unexpected results and you cannot determine their cause, attempt to replicate any issues you encounter in your Copy of Production database on a delivered Demo database. If the issue does occur on Demo, it should be reported to the Global Support Center. Check PeopleSoft Customer Connection to see if a fix has been posted to resolve the issue.

See PeopleSoft Customer Connection (Updates + Fixes).

Task D-7-10: Evaluating Reasons for Failure

The list below identifies reasons why your test plan might have failed:

- Testing strategy was poorly defined

- Test plans were poorly defined

- Test scripts were poorly defined

- Lack of resources and resource commitment

- Lack of understanding of the upgrade process

APPENDIX E

Preserving Queries and Tree Objects

This appendix discusses:

- Understanding Preserve Queries and Trees
- Preparing the Database
- Creating a New Project
- Comparing the New Project
- Copying the Project
- Testing the Project
- ReExporting the PeopleTools Tables

Understanding Preserve Queries and Trees

This appendix contains information for preserving queries, trees, and tree structures. At the beginning of your upgrade, you should have informed your end-users and development team that your PeopleSoft system was frozen, meaning that no changes should have been made to any PeopleSoft PeopleTools tables or objects including queries, trees, and tree structures. The freeze on PeopleSoft PeopleTools changes is important because you will lose any changes to these objects made during an upgrade to PeopleSoft PeopleTools tables. Occasionally, however, end-users may have to make critical changes to trees, tree structures, and PS/Query objects. If this has happened in your system, you can perform a process to preserve those additions and changes to trees, tree structures, and queries. You will have to work with your end-users and developers to obtain a list of queries, trees, and tree structures that you need to preserve.

You will run through the test Move to Production (MTP) steps several times for practice and testing purposes. Please note that you have the option to perform the preserving queries and trees procedure during each of your test Move to Production runs, but you must perform it during the last run of the test Move to Production. If you do not perform this procedure during your last run to preserve the trees, tree structures, and queries that have been changed since the beginning of your upgrade, they will be lost.

Note. The process outlined in this appendix to preserve trees and queries should be performed prior to data conversion so that any additional conversion would be taken care of by the appropriate data conversion programs.

This appendix includes instructions to prepare your database and create a project on which to preserve your queries, trees, and tree structure changes.

Task E-1: Preparing the Database

In this step, you create a new copy of your current production database, perform steps on the new copy, and run scripts against the new copy to update the release level.

To prepare the database:

1. At the beginning of the test Move to Production, you should make a new copy of your current production database. To preserve queries and trees, you need to make not only that Copy of Production but also an additional copy of your current production database. For clarity, Oracle refers to this additional copy of your production database as the Tree/Query Copy of Production database. So now you should have a Copy of Production database and a Tree/Query Copy of Production database.

2. Perform the test Move to Production on your Copy of Production database.

3. To obtain the queries and trees that you want to preserve, the Tree/Query Copy of Production database needs to be at the same release level as the Copy of Production database on which you just completed the test Move to Production. To update your Tree/Query Copy of Production to the same release, you run release scripts against this database. Oracle refers to this as "reling up" the database. Use the Custom Compare template to "rel up" your database. Select the Product Line *PEOPLETOOLS* when configuring your Change Assistant job.

Task E-2: Creating a New Project

Now that your Tree/Query Copy of Production is at the same release as your Copy of Production database, you create a project in the Tree/Query Copy of Production that contains all of the queries and trees that you wish to preserve.

To create a new project:

1. Sign on to the Tree/Query Copy of Production using a valid PeopleSoft User ID and launch Application Designer.

2. Select File, New...

3. Select *Project* for Object Type.

4. Select File, Save Project and enter a project name; for example, *PRESERVED*.

5. Select the Upgrade tab in Application Designer.

    Note. Queries and trees do not appear in projects under the Development tab in Application Designer. To see the queries and trees that you will insert into the PRESERVED project in the next step, you must make sure that you are using the Upgrade view of Application Designer.

6. Select Insert, Definitions into Project...

7. Select Queries from the Definition Type drop-down list box and click Insert.

8. Using your list of identified queries that need to be preserved, highlight each one of those queries from the Application Designer list.

    You can highlight more than one by holding down the Control (CTRL) key while you click the name of the query.

9. After you have highlighted all of the queries that you want to preserve, click Insert, then click Close.

   Under the PRESERVED project name in the Upgrade view of Application Designer, you will see Queries as an object type in the project.

10. Double-click on queries under the PRESERVED project to see a listing of all of the queries to preserve in the right-hand window of Application Designer.

11. Select File, Save Project.

12. Repeat steps 6 through 11 for trees and tree structures.

    Now your PRESERVED project should contain all of the queries, trees, and tree structures that you want to preserve.

Task E-3: Comparing the New Project

In this step, you compare the queries, trees, and tree structures that are in your PRESERVED project against your Copy of Production database. Because the tree objects in your PRESERVED project are not comparable objects in Application Designer, you must manually compare the tree objects that you want to preserve. During the query and tree structure compare process, the Application Upgrade utility sets the project flags. These flags determine whether the following actions will occur:

- Changes will be performed on the Copy of Production (Target) database when you perform the export and copy.
- Changes will be tagged as *Copy* or *Delete* operations.
- The project flags will be set to automatically take these actions or not.

These settings are determined based on whether or not the objects in the project currently exist on the Copy of Production (Target) database.

To compare the new project:

1. Sign on to the Tree/Query Copy of Production using a valid PeopleSoft User ID and launch Application Designer.

2. Select File, Open...

3. For Definition, select Project and click Open to display the list of projects.

4. Select the PRESERVED project and click Open.

5. Select Tools, Compare and Report.

6. Sign on to your Copy of Production.

7. From the Object Type box, select *Queries and Tree Structures*.

8. Click Options…

9. Select *PeopleSoft Vanilla* for the Target Orientation.

10. Select *Project* for the Compare Type.

11. Verify that the Compare Report output directory is set to the correct location.

12. Select the Report Filter tab and set the report filter check boxes appropriately for your compare.

13. Click OK.

14. Select Compare.

15. Review the compare reports for queries and tree structures. In addition, perform a manual compare of the trees that you want to preserve. Based on the results of this review, set the Action and Upgrade check box appropriately in the PRESERVED project.

Task E-4: Copying the Project

In the following steps, you copy the PRESERVED project to the Target database. This is the Copy of Production database on which you ran the test Move to Production.

To copy the project:

1. Sign on to the Tree/Query Copy of Production using a valid PeopleSoft User ID and launch Application Designer.

2. Select File, Open...

3. For Definition, select *Project* and click Open to display the list of projects.

4. Select the PRESERVED project and click Open.

5. Select Tools, Upgrade, Copy.

6. Sign on to your Copy of Production database.

7. Make sure that the Reset Done Flags and Copy Project check boxes are selected.

8. Click Select All.

9. Click Copy.

10. Using the Upgrade view of the PRESERVED project in Application Designer, review the Done flags in the project to make sure that all of the objects that you wanted to preserve were copied to the Target database.

Task E-5: Testing the Project

Now that the queries, trees, and tree structures that you wanted to preserve are in the Copy of Production database, you must test and re-test and make any necessary changes if the test results are not what you expected.

Task E-6: ReExporting the PeopleTools Tables

Once you are satisfied with the test results, you must re-export the PeopleSoft PeopleTools tables to actually preserve the queries, trees, and tree structures. During your test Move to Production, you ran MVPRDEXP.DMS to export the PeopleSoft PeopleTools tables. You will use the output files created from running this job as input files during your Move to Production. Because these files were created before copying the queries, trees, and tree structures that you wanted to preserve, the files do not contain the preserved objects, so you must run the MVPRDEXP.DMS script again. Running the MVPRDEXP.DMS script again ensures that you have the most current PeopleSoft PeopleTools tables.

To re-export the PeopleTools tables:

1. As a PeopleSoft user, launch Data Mover against your Copy of Production database and run the following script:

   `\PS_HOME\SCRIPTS\MVPRDEXP.DMS`

2. Use the output files created during your final Move to Production.

APPENDIX F

Upgrading the Content Provider Registry

This appendix discusses:

- Understanding the Content Provider Registry Upgrade
- Copying Your Enterprise Portal Database
- Upgrading Enterprise Portal PeopleTools
- Updating Registry Permission Lists
- Creating the Portal Project
- Comparing the Portal Project
- Reviewing the Portal Project
- Copying the Portal Project
- Copying Portal Project to Production
- Deleting Obsolete Folders
- Updating Registry Folder Permissions

Understanding the Content Provider Registry Upgrade

You should perform this task if you use the Enterprise Portal 8.4 or higher running on PeopleTools 8.4x with the full navigation load access method. This means you do not use a single link to access your content provider database, but instead load some or all of the portal registry structures from the content provider database into your Enterprise Portal database. PeopleSoft refers to its application databases that contain the transaction content as Content Provider databases. Your Copy of Production database is your Content Provider database for this task.

When you upgrade a content provider database, the registry structures are updated, removed and added. These changes need to be copied to the Enterprise Portal database. This task will update the portal registry structures in your Enterprise Portal database to match what is in the Content Provider database. This is accomplished by the following:

- Upgrade the PeopleTools on a copy of the Enterprise Portal database.

  This allows a project compare to run between the Enterprise Portal and the Content Provider database.

- Create a portal project in the Enterprise Portal database containing all of the existing Content Provider registry structures.

  Copy the portal project (definition only) to the Content Provider database.

- Create a portal project in the Content Provider database containing all of the current Content Provider registry structures, then merge the project definition copied from the Enterprise Portal database into this project.

  You will have a complete list of all registry structures for the Content Provider, including what is current and what should be deleted.

- Compare the complete list of registry structures in the Content Provider database to what exists in the Enterprise Portal, using project compare.

  This marks the missing registry structures as delete and the updated or added registry structures as copy in the portal project definition.

- Copy the portal project from the Content Provider database to the Enterprise Portal database.

  This deletes, updates, and adds registry structures to the Enterprise Portal database which syncs it up with what is current in the Content Provider database.

If you use Enterprise Portal 8 SP2, PeopleSoft recommends that you upgrade your Enterprise Portal to the latest available release.

If you do upgrade your Enterprise Portal database, you must be on PeopleTools 8.46 or higher.

Note. If you use Enterprise Portal 8.4 you *do not* need to upgrade to Enterprise Portal 8.8. You can still upgrade to PeopleTools 8.46.

See Enterprise Portal 8.1x – Managing Information Architecture on PeopleSoft Customer Connection (Support, Documentation, Documentation Updates, Enterprise, Portal Products, Enterprise Portal) for additional information on this topic.

In this appendix, you load your new Portal Registry definitions from your Copy of Production database to a copy of your Enterprise Portal database.

Note. You must complete the tasks in the appendix for each of your separately installed Enterprise Portal databases that correspond to one of the four Portal Registry definitions: EMPLOYEE, CUSTOMER, SUPPLIER, and PARTNER. If your installed Enterprise Portal uses all the registries, then complete this task for each of the portal registries using the same copy of the single Enterprise Portal database.

In the first task of this appendix, you create a copy of your Enterprise Portal database. You use this copy for all subsequent steps for the initial and test Move to Production upgrade passes. For the final Move to Production, do not make a copy. Instead perform the steps on the production Enterprise Portal database.

This document uses the term "target Enterprise Portal database" to refer to the Enterprise Portal database used in the upgrade steps. Use the table below to determine the correct copy of your Enterprise Portal database for each pass:

Upgrade Pass	Target Enterprise Portal Database
Initial pass	Copy of the Enterprise Portal database
Test Move to Production	Copy of the Enterprise Portal database
Final Move to Production	Enterprise Portal production database

Task F-1: Copying Your Enterprise Portal Database

You initially upgrade the Content Provider registry on a copy of your Enterprise Portal database, then test the results of the upgrade. During your test Move to Production, you perform this task against another Copy of the Enterprise Portal.

Create a copy of your current Enterprise Portal production database now. Use this database as your target Enterprise Portal database.

Note. During your final Move to Production, you copy the registry definitions directly to your Enterprise Portal production database. Therefore, you do not need to execute this step during your final Move to Production.

Task F-2: Upgrading Enterprise Portal PeopleTools

During the initial upgrade pass, your Enterprise Portal database must run on the same PeopleTools release level as your Copy of Production database so that you can do the compare step. Because you do not need to run the compare step during your Move to Production passes, you can skip this task during Move to Production passes.

If the release level of PeopleTools on your target Enterprise Portal database is not the same as your Copy of Production database release level, upgrade your PeopleTools now.

See PeopleSoft Customer Connection (Implement Optimize + Upgrade, Upgrade Guide, Upgrade Documentation and Software, Upgrade Documentation and Scripts, Release, Enterprise, PeopleTools).

Task F-3: Updating Registry Permission Lists

This section discusses:

• Understanding Registry Permission Lists Updates

• Updating Portal Registry

• Deleting the Database Cache

Understanding Registry Permission Lists Updates

This task applies only to the initial upgrade pass.

Earlier in this upgrade you copied portal registry data from the Demo database to your Copy of Production database. You must update this registry data to include your permission list changes. After updating the portal registry permission lists, delete the database cache.

This process takes between a few minutes and a few hours, depending on the volume of the portal data.

Note. The user ID that invokes this process must have the security role Portal Administrator, or the process may terminate with an abend.

Note. You must have a process scheduler started for your Copy of Production database.

Task F-3-1: Updating Portal Registry

Follow the steps below to update your portal registry permission lists.

To update the portal registry permission lists:

1. On your Copy of Production database, select PeopleTools, Portal, Portal Security Sync.

2. Select the Add a New Value tab.

3. Add a run control as follows:

    a. Enter a value for the run control ID. The run control ID is *SECURITY_SYNC_XXXX*, where *XXXX* represents the portal registry name (EMPLOYEE, CUSTOMER, SUPPLIER, or PARTNER).

    b. Click Add.

4. Enter a value for the portal name.

    This value must match the portal registry name you used to replace the *XXXX* in the run control ID.

5. Click Save.

6. Click Run.

7. Set up the process scheduler information and click OK.

8. Click the Process Monitor link to view the progress of the process.

Task F-3-2: Deleting the Database Cache

Follow the steps below to delete the database cache.

To delete the database cache:

1. Delete the Copy of Production database application server cache.

2. Stop and restart the Copy of Production database web server service.

Task F-4: Creating the Portal Project

This section discusses:

- Understanding Portal Project Creation
- Creating the Target Enterprise Portal Project
- Cleaning the Target Enterprise Portal Project
- Deleting the Target Enterprise Portal Database Cache
- Copying the Target Enterprise Portal Project Definition
- Creating the Copy of Production Portal Project
- Cleaning the Copy of Production Portal Project
- Deleting the Copy of Production Database Cache

Understanding Portal Project Creation

This task applies only to the initial upgrade pass. In this task, you create and modify a project on your target Enterprise Portal database. Then you copy the project definition to the Copy of Production database, where you further modify the project.

Task F-4-1: Creating the Target Enterprise Portal Project

Follow the steps below to create the target Enterprise Portal project.

To create the target Enterprise Portal project:

1. Launch Application Designer and sign on to your target Enterprise Portal database.

2. Select Insert, Definitions into Project…

3. Select the following values:

   a. In the Definition Type field, select *Portal Registry Structures*.

   b. Leave the Portal Name field blank.

   c. In the Owner ID field, select *All Owners*.

   d. Do not select any values in the Related Definitions field.
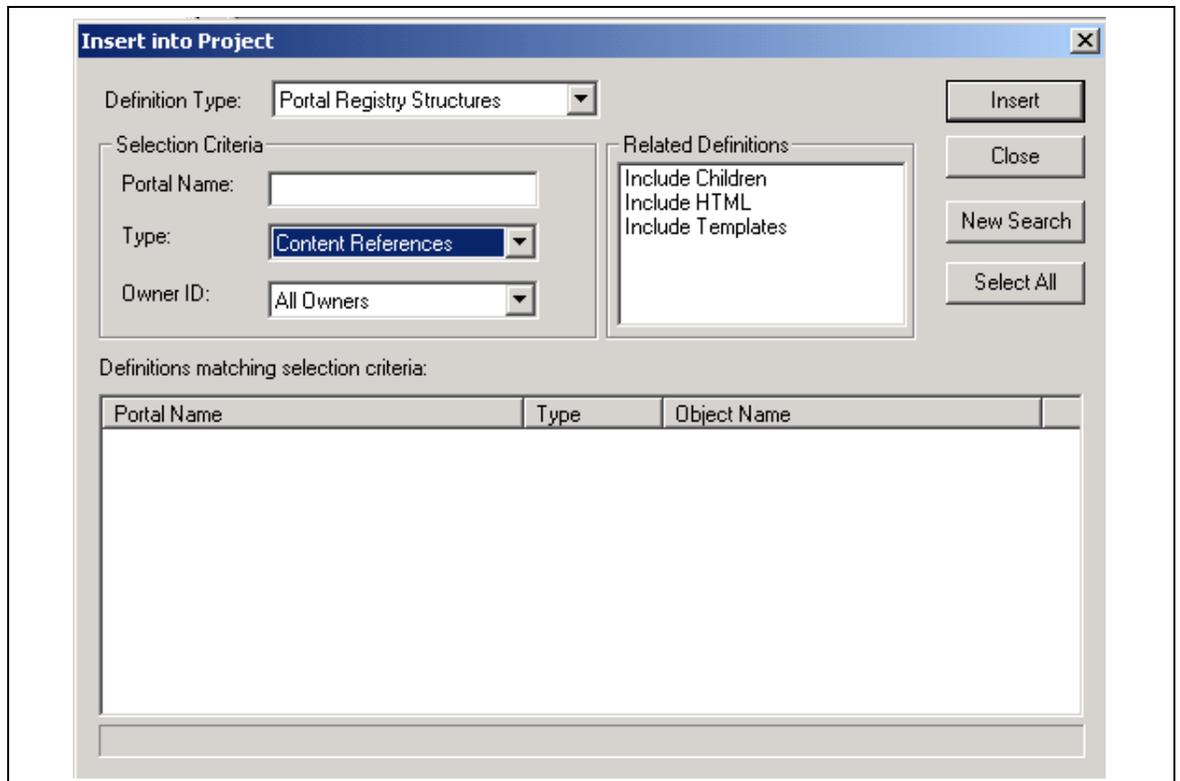
Insert into Project dialog box

4. Click Insert.

5. Click Select All, and the click Insert again

6. Click Close.

7. From Application Designer, select File, Save Project As….

8. Enter the project name *PORTAL_PA84X_REGISTRY*.

9. Close Application Designer.

Task F-4-2: Cleaning the Target Enterprise Portal Project

In this step, you clean the target Enterprise Portal Project so that it contains only the existing Content Provider registry structure content references.

To clean the target Enterprise Portal project:

1. In your Enterprise Portal database, select PeopleTools, Portal, Portal Utilities, Clean Portal Project.

    Warning! Do not follow the instructions on the Clean Portal Project page. Instead, follow the instructions below.

    ---

2. Add the run control ID CLEAN_PORTAL_XXXXXXXX where XXXXXXXX represents the portal definition name: EMPLOYEE, CUSTOMER, SUPPLIER or PARTNER for example.

3. In the Project Name field, enter the project name *PORTAL_PA84X_REGISTRY*.

4. Enter a value in the Portal Name field; *EMPLOYEE* for example.

5. Enter a value in the Content Provider Name field; *CRM* for example.

    Note. Before running the Clean Portal Project you must enter the node URI text for the message node that you selected.

    ---

6. Select *Full Navigation*.

7. Click Save.

8. Click Run.

9. Set up the Process Scheduler information and click OK.

10. Select the Process Monitor link to view the progress of the process.

Task F-4-3: Deleting the Target Enterprise Portal Database Cache

In this step, you delete the target Enterprise Portal database cache.

To delete the target Enterprise Portal database cache:

1. On your target Enterprise Portal database, launch Configuration Manager.

2. On the Startup tab, click Purge Cache Directories.

3. Select the target Enterprise Portal database name.

4. Click Delete.

5. Click OK.

6. Click Close.

7. Click OK to close Configuration Manager.

Task F-4-4: Copying the Target Enterprise Portal Project Definition

In this step, you copy the target Enterprise Portal project definition to your Copy of Production database.

To copy the target Enterprise Portal project definition:

1. Using PeopleSoft Data Mover, sign on to your target Enterprise Portal database.

2. Run the following Data Mover script:

   `PS_HOME\SCRIPTS\UVUPX10E.dms`

3. Close Data Mover.

4. Using PeopleSoft Data Mover, sign on to the Copy of Production database.

5. Run the following Data Mover script:

   `PS_HOME\SCRIPTS\UVUPX10I.dms`

6. Close Data Mover.

Task F-4-5: Creating the Copy of Production Portal Project

Create a project containing all Portal Registry data on your Copy of Production database.

To create the Copy of Production Portal project:

1. Launch Application Designer and sign on to your Copy of Production database.

2. Select Insert, Definitions into Project….

3. In the Definition Type field, select *Permission Lists*.
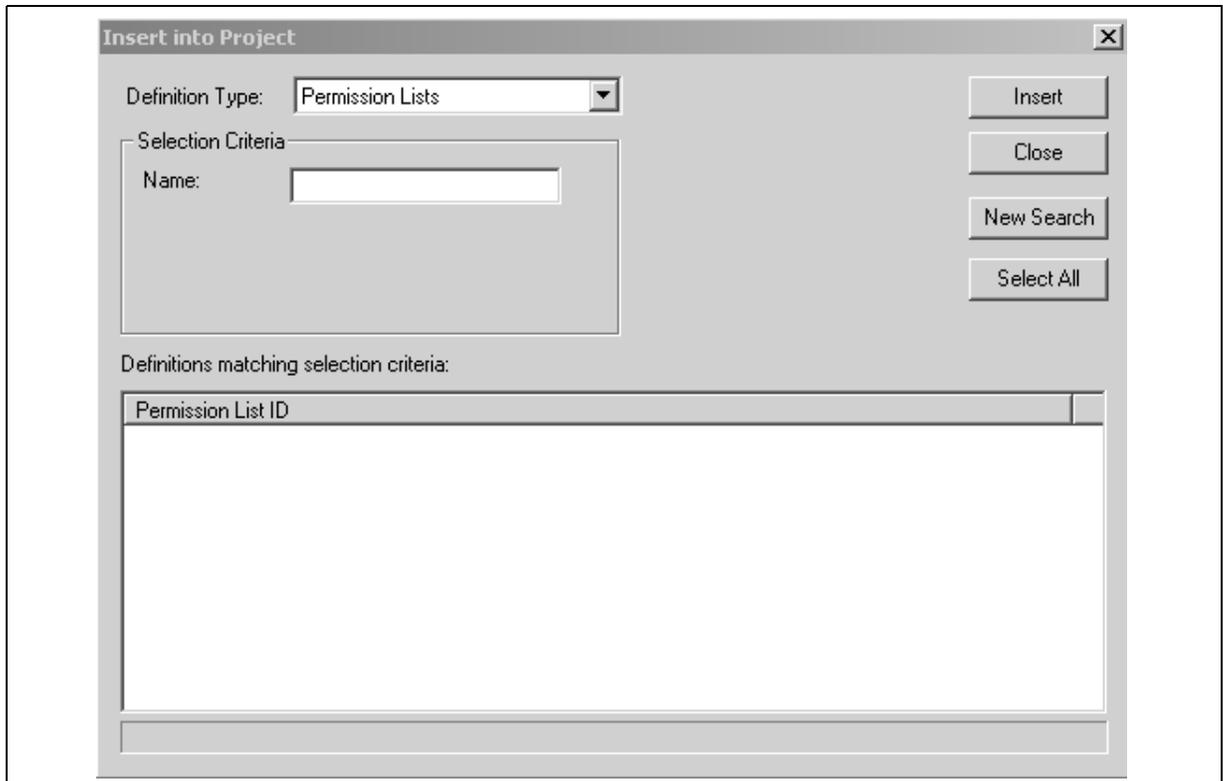
Insert into Project dialog box: Definition Type Permission Lists

4. Click Insert.

5. Click Select All, and then click Insert again.

6. Select the following values:

   a. In the Definition Type field, select *Portal Registry Definitions.*

   b. In the Name field, enter the Enterprise Portal database's default portal name (EMPLOYEE, CUSTOMER, SUPPLIER or PARTNER).

   c. In the Owner ID field, select *All Owners.*

   d. In the Related Definitions field, select *Portal Registry Structures.*
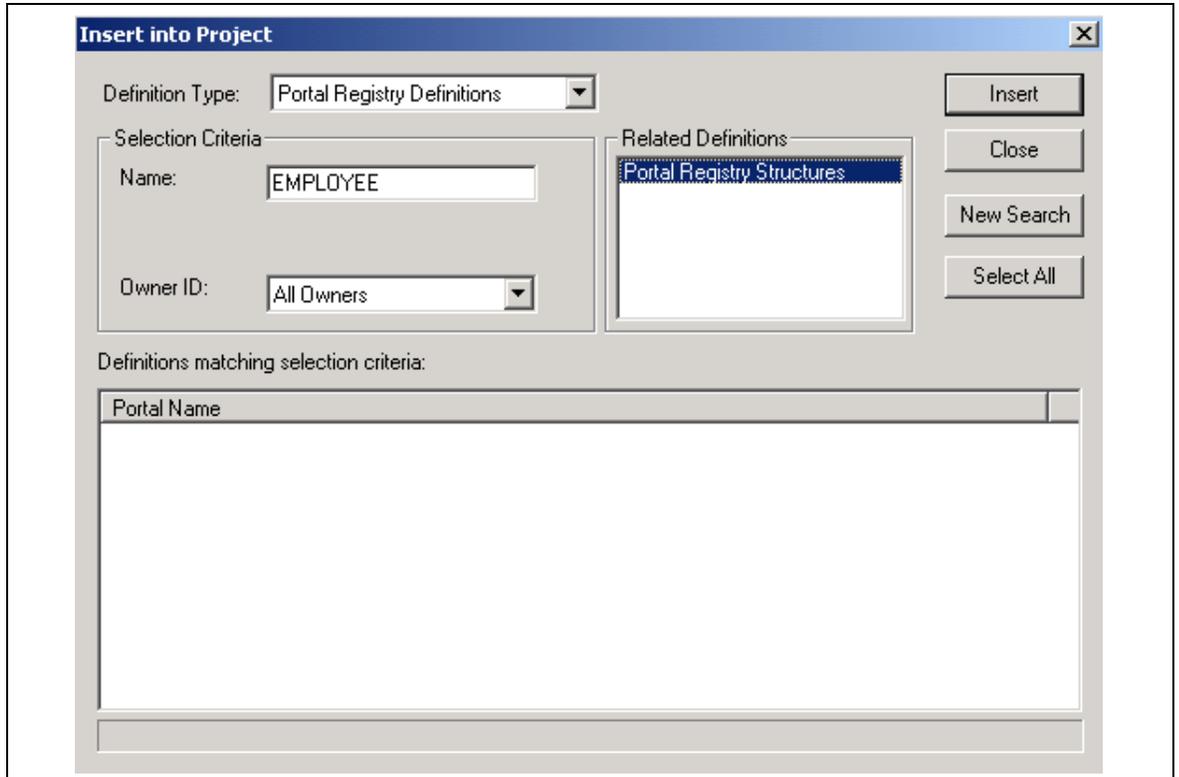
Insert into Project dialog box with Portal Registry Structures selected

7. Click Insert.

8. Click Select All, then click Insert again.

9. Click Close.

10. From Application Designer, select File, Save Project As….

11. Enter the appropriate new project name from the table below. This project is referred to as the Portal Project:

Portal Name	Project Name
EMPLOYEE	PORTAL_APP84X_EMPLOYEE
CUSTOMER	PORTAL_APP84X_CUSTOMER
PARTNER	PORTAL_APP84X_PARTNER
SUPPLIER	PORTAL_APP84X_SUPPLIER

12. Click OK.

13. From Application Designer, select File, Merge Projects...

14. Enter the project name *PORTAL_PA84X_REGISTRY.*

    This merges the objects from the PORTAL_PA84XREGISTERY project into your newly created Portal Project.

15. Select File, Save Project to save the updated Portal Project.

16. Close Application Designer.

Task F-4-6: Cleaning the Copy of Production Portal Project

In this step, you clean the Copy of Production Portal project so that it contains only the Content Provider registry data.

Important! Before using the Copy of Production Portal project, you must run the Clean Portal Project on the Copy of Production database. Follow the directions on the Clean Portal Project Page.

To clean the Copy of Production Portal project:

1. In your Copy of Production database, select PeopleTools, Portal, Portal Utilities, Clean Portal Project.

2. Add the run control ID, *CLEAN_PORTAL_XXXXXXXX*, where *XXXXXXXX* represents the portal definition name; EMPLOYEE, CUSTOMER, SUPPLIER, or PARTNER, for example.

3. In the Project Name field, enter the Portal Project name that you created in the Creating the Copy of Production Portal Project step (PORTAL_APP84X_[your portal name here]).

4. Enter a value in the Portal Name field; *EMPLOYEE*, for example.

5. Enter a value in the Content Provider Name field; *CRM*, for example.

   Important! Before running the Clean Portal Project, you must enter the Node URI text for the Message Node you selected.

   ---

6. Select *Full Navigation*.

7. Click Save.

8. Click Run.

9. Set up the Process Scheduler information and click OK.

10. Select the Process Monitor link to view the progress of the process.

Task F-4-7: Deleting the Copy of Production Database Cache

In this step, you delete the Copy of Production database cache.

To delete the Copy of Production database cache:

1. On your Copy of Production database, start Configuration Manager.

2. On the Startup tab, click Purge Cache Directories.

3. Select the Copy of Production database name.

4. Click Delete.

5. Click OK.

6. Click Close.

7. Click OK to close Configuration Manager.

Task F-5: Comparing the Portal Project

This task applies only to the initial upgrade pass.

In this step, you compare the Portal project that you created in the previous step and then review the compare results. This will enable you to adjust the portal project as necessary before copying it into the Enterprise Portal database.

To compare the Portal Project:

1. Launch Application Designer and sign on to your Copy of Production database.

2. Select Tools, Compare and Report....

3. Enter the Portal Project name that you specified in the Creating the Copy of Production Portal Project step (PORTAL_APP84X_[your portal name here]).

4. Enter the database name of your target Enterprise Portal database, and the user ID and password.

5. Click the Options button.

6. In the Compare Type field, select *Project*, and click OK.

7. Select all object types and click OK.

8. Close Application Designer.

Task F-6: Reviewing the Portal Project

This task applies only to the initial upgrade pass.

Review the Portal project (PORTAL_APP84X_[your portal name here]) on the Copy of Production database, looking for customizations that you have applied to your database. Object definitions that you changed have *Changed* or *Unchanged* in the Target column of the compare report. The * indicates that the change was not made by PeopleSoft. Review each of these objects carefully. If PeopleSoft delivered the object, the Source column of the report will read *Changed*. Note the changes that you made to the object. After you complete the upgrade, when you test the system, you can decide whether you still need the customization. You can reapply the customization at that time.

See Appendix: "Using the Comparison Process."

Task F-7: Copying the Portal Project

This section discusses:

• Understanding Portal Project Copying

• Copying the Portal Project

• Deleting the Enterprise Portal Database Cache

Understanding Portal Project Copying

This task applies only to the initial upgrade pass.

In this step, you copy the project from your Copy of Production database to your target Enterprise Portal database.

Task F-7-1: Copying the Portal Project

Follow the steps below to copy the Portal Project to the Enterprise Portal database.

Important! Before exporting the Portal Project from the Content Provider database, you must successfully clean the Copy of Production Portal Project. If you proceed with this step without cleaning the project, you will overwrite critical Enterprise Portal data.

See Creating the Portal Project, Cleaning the Copy of Production Portal Project.

To copy the Portal Project:

1. Launch Application Designer and sign on to your Copy of Production database.
2. Select File, Open...
3. In the Definition field, select *Project* and click Open.
4. Highlight the newly created Portal Project name (PORTAL_APP84X_[your portal name]) and click Open again.
5. Select Tools, Copy Project, To Database...
6. Enter the name of your target Enterprise Portal database, and the user ID and password.
7. Click Select All.
8. Click Copy.

   This may take a few minutes.

9. Close Application Designer.

Note. You do not need to create or alter any records or views.

Task F-7-2: Deleting the Enterprise Portal Database Cache

In this step, you delete the Enterprise Portal database cache.

To delete the Enterprise Portal database cache:

1. Delete the target Enterprise Portal database application server cache.
2. Stop and restart the target Enterprise Portal database web server service.

Task F-8: Copying Portal Project to Production

This section discusses:

- Understanding Portal Project to Production Copying
- Copying the Portal Project to File
- Copying the Portal Project from File
- Deleting the Enterprise Portal Database Cache Again

Understanding Portal Project to Production Copying

You must perform this step during both your test and final Move to Production upgrade passes.

Task F-8-1: Copying the Portal Project to File

Follow the steps below to copy the Portal Project to file.

Note. If your Copy of Production and target Enterprise Portal databases run on the same PeopleTools release and database platform, you can copy the project directly to the target Enterprise Portal database from within the Copy of Production Application Designer and skip the rest of this step.

To copy the Portal Project to file:

1. Launch Application Designer and sign on to your Copy Production database.
2. Select File, Open....
3. In the Definition field, select *Project* and the click Open.
4. Highlight the newly created Portal Project name (PORTAL_APP84X_[your portal name]) and click Open again.
5. Select Tools, Copy Project, To File....
6. Click the Browse button for the Export Directory.
7. Select a temporary directory and then click OK.
8. Click Select All.
9. Click Copy.

   This may take a few minutes.
10. Close Application Designer.

Task F-8-2: Copying the Portal Project from File

In this step, you copy the Portal Project from file.

To copy the Portal Project from file:

1. Launch Application Designer and sign on to your target Enterprise Portal database.
2. Select Tools, Copy Project, From File....
3. Browse to the Copy of Production database server's temporary directory.

   If you cannot access the Copy of Production database server's temporary directory, then copy the Portal Project folder and files from the temporary directory to the target Enterprise Portal database server's *PS_HOME*\PROJECTS directory, and browse to that directory.
4. Select the Portal Project name that you just copied to file in the previous step.
5. Click Open.
6. Click Select All.
7. Set the project language options as follows:
   a. Click Options.
   b. In the Copy Options tab, select *English*, and *COMMON*.

    c. If your Enterprise Portal database is a multi-language database, then also select the languages that you have installed on your Enterprise Portal database.

    d. Click OK.

8. Click Copy.

9. Select the Upgrade tab and view the Output window.

    All objects should have copied successfully.

10. Close Application Designer.

Note. After the copy, you do not need to create or alter any records or views on the target Enterprise Portal database.

Task F-8-3: Deleting the Enterprise Portal Database Cache Again

In this step, you delete the Enterprise Portal database cache.

To delete the Enterprise Portal database cache:

1. Delete the target Enterprise Portal database's application server cache.

2. Stop and restart the target Enterprise Portal database web server service.

Task F-9: Deleting Obsolete Folders

This section discusses:

- Understanding Obsolete Folder Deletion
- Deleting Obsolete Folders on Enterprise Portal 8.4
- Deleting Obsolete Folders on Enterprise Portal 8.8

Understanding Obsolete Folder Deletion

This task applies to all upgrade passes: Initial, Test Move to Production, and Final Move to Production.

In this step, you delete folders on your target Enterprise Portal database that the Portal Registry Structures no longer reference. The process that you run depends on your version of Enterprise Portal.

Task F-9-1: Deleting Obsolete Folders on Enterprise Portal 8.4

Follow this procedure to delete obsolete folders on Enterprise Portal 8.4.

To delete obsolete folders on Enterprise Portal 8.4:

1. Using PeopleSoft Data Mover, sign on to your target Enterprise Portal database.

2. Run the following Data Mover script, located in the Enterprise Portal PS_HOME\SCRIPTS directory:

    `PORTAL_REG_FOLDER_DEL.DMS`

3. Close Data Mover.

Task F-9-2: Deleting Obsolete Folders on Enterprise Portal 8.8

Follow this procedure to delete obsolete folders on Enterprise Portal 8.8 or higher.

To delete obsolete folders on Enterprise Portal 8.8 or higher:

1. On your target Enterprise Portal database, navigate accordingly:

    a. For Enterprise Portal 8.8: Portal Administration, Navigation, Run Folder Cleanup.

    b. For Enterprise Portal 8.9 or higher: Portal Administration, Navigation, Delete Empty Folders.

2. Add a run control as follows:

    a. Enter a value for the run control ID. The run control ID is *FOLDER_CLEAN_XXXX*, where *XXXX* represents the portal registry name (EMPLOYEE, CUSTOMER, PARTNER, or SUPPLIER).

    b. Click Add.

3. Enter a value in the Portal Name field.

    This value must match the portal registry name that you used to replace *XXXX* in the run control ID (EMPLOYEE, CUSTOMER, PARTNER, or SUPPLIER).

4. Click Save.

5. Click Run.

6. Set up the process scheduler information and click OK.

7. Click the Process Monitor link to view the progress of the process.

Task F-10: Updating Registry Folder Permissions

This section discusses:

- Understanding Registry Folder Permissions Updates

- Updating the Enterprise Portal Registry Folder Permissions

- Deleting the Enterprise Portal Cache

Understanding Registry Folder Permissions Updates

This task applies to all upgrade passes: Initial, Test Move to Production, and Final Move to Production.

Portal data from different Content Provider databases may share a common portal folder. After copying the registry projects, you must update the folder permissions to reflect the changes. After you update the folder permissions, you must delete the target Enterprise Portal database cache files to propagate the changes.

Task F-10-1: Updating the Enterprise Portal Registry Folder Permissions

Follow this procedure to update your Enterprise Portal registry folder permissions.

Note. This process will take between a few minutes to a few hours, depending on the volume of portal data. The user ID that invokes this process must have the security role Portal Administrator, or the process may terminate with an abend.

To update the Enterprise Portal folder permissions:

1. On your target Enterprise Portal database, select PeopleTools, Portal, Portal Security Sync.

2. Add a run control as follows:

   a. Enter a value for the run control ID.

      The run control ID is *SECURITY_SYNC_XXXX*, where *XXXX* represents the portal registry name (EMPLOYEE, CUSTOMER, PARTNER, or SUPPLIER).

   b. Click Add.

3. Enter a value in the Portal Name field.

   This value must match the portal registry name that you used to replace *XXXX* in the run control ID (EMPLOYEE, CUSTOMER, PARTNER, or SUPPLIER).

4. Click Save.

5. Click Run.

6. Set up the process scheduler information and click OK.

7. Click the Process Monitor link to view the progress of the process.

Task F-10-2: Deleting the Enterprise Portal Cache

In this step delete the Enterprise Portal cache.

To delete the Enterprise Portal cache:

1. Delete the target Enterprise Portal database application server cache.

2. Stop and restart the target Enterprise Portal database web server service.

APPENDIX G

Using Data Conversion Utilities

This appendix discusses:

- Understanding Data Conversion Utilities
- Using the Upgrade Driver Program
- Using the Upgrade Drivers Page
- Reviewing the Data Conversion Report

Understanding Data Conversion Utilities

This appendix contains information regarding the Application Engine program UPG_DATACONV and the PS_UPG_DATACONV table.

Task G-1: Using the Upgrade Driver Program

In order to run all data conversions in the correct sequence, Oracle has provided the Application Engine program UPG_DATACONV and the PS_UPG_DATACONV table. This program runs the Application Engine sections defined in the table PS_UPG_DATACONV. The PS_UPG_DATACONV table contains a list of all of the Application Engine sections that you need to run and in what sequence they should be run.

Task G-2: Using the Upgrade Drivers Page

This section discusses:

- Understanding Upgrade Drivers Page
- Accessing the Upgrade Drivers Page
- Adding New Upgrade Drivers Section Page
- Inactivating Upgrade Drivers Section

Understanding Upgrade Drivers Page

Before you run data conversion, you may need to change what the Upgrade Driver program runs. You can add, remove, or deactivate Application Engine sections through the Upgrade Drivers page.

You do not have an active portal on your Copy of Production during data conversion, so you need to view and update the Data Conversion Definitions on your Demo database and then copy the updated data to your Copy of Production database.

Task G-2-1: Accessing the Upgrade Drivers Page

To access the Upgrade Drivers page:

1. From your browser, sign on to the Demo database.

2. Select Set Up CRM, Upgrade, Define Upgrade Drivers.

3. Enter your upgrade path:

   ```
   CRM 8.8x for CRM 8.80
   CRM 8.81x for CRM 8.1
   ```

4. Click Search.

   You are now on the Upgrade Drivers page. The following are descriptions for each section of the Upgrade Drivers page.

Upgrade Drivers page

- Upgrade Path. This field contains the upgrade path on which the section will be run.

- Program Name. This is the Application Engine program that contains the section.

- Group #. This is the group number. All sections with the same group number will be run during the same run of the UPG_DATACONV Application Engine program.

- Section. This is the section that will be called from the UPG_DATACONV Application Engine program.

- Sequence. This is the order in which the sections will be called during the run of UPG_DATACONV for the group number.

- Active Flag. This field determines whether the section will be run. If the value of this field is *Active*, the section will be run. If the value is *Inactive*, it will not be run. If you need to remove a section, change the value in this field to *Inactive*.

- Description.

- Comments.

Task G-2-2: Adding New Upgrade Drivers Section Page

Follow the instructions below to add a new section to the Upgrade Drivers page.

Note. To add a new section, the Application Engine program and section must exist on the Demo database.

To add a new section to the Upgrade Drivers page:

1. From your browser, sign on to the Demo database.

2. Select Set Up CRM, Upgrade, Define Upgrade Drivers.

3. Select Add a New Value.

4. Click Add.

5. Enter values for Upgrade Path and Program Name.

6. Enter a value for Group #.

> **Note.** Each group number corresponds to a data conversion step in the Change Assistant template. If you select a group number that already exists in the PS_UPG_DATACONV table, your section will be executed when Change Assistant runs the data conversion step that corresponds to the group number you selected. Alternatively, if you assign a group number to your new section that does not already exist in PS_UPG_DATACONV, you must add a new step to your Change Assistant template. The new template step will have the same properties as the other data conversion steps, except for the group number specified in the step properties Parameters box.

7. Enter values for Section and Sequence.

   The Description and Comments fields are optional.

8. Click Save.

9. When you have completed all changes, sign on to your Demo database using Data Mover and run the following script to export the updated data conversion data:

   ```
   DLUPX03E.DMS
   ```

10. Sign on to your Copy of Production database using Data Mover and run the following script to load the updated data conversion data:

    ```
    DLUPX03I.DMS
    ```

    See the Enterprise PeopleTools PeopleBook: PeopleSoft Software Updates for your new release, Appendix: "Using a Change Assistant Template."

Task G-2-3: Inactivating Upgrade Drivers Section

Follow the instructions below to deactivate a section on the Upgrade Drivers page. Once deactivated, the section will not run as part of data conversion.

To inactivate a section on the Upgrade Drivers page:

1. From your browser, sign on to the Demo database.

2. Select Set Up CRM, Upgrade, Define Upgrade Drivers.

3. Enter your upgrade path:

   ```
   CRM 8.8x for CRM 8.80
   CRM 8.81x for CRM 8.81
   ```

4. Click Search.

5. Find the row with the Program Name and Section you want to remove and change the value of the Active Flag field to *Inactive*.

6. Click Save.

7. When you have completed all changes, sign on to your Demo database using Data Mover and run the following script to export the updated data conversion data:

    ```
    DLUPX03E.DMS
    ```

8. Sign on to your Copy of Production database using Data Mover and run the following script to load the updated data conversion data:

    ```
    DLUPX03I.DMS
    ```

Task G-3: Reviewing the Data Conversion Report

Each of the upgrade data conversion sections contains comments that describe the processing performed by the section. PeopleSoft has delivered an SQR to list all of these comments by the group and sequence numbers that determine how they run. The name of this report is UDATACNV.

To run UDATACNV:

1. Using SQRW, run SQR UDATACNV on your Copy of Production database.

2. When prompted for Upgrade Path, enter:

    ```
    C880 for CRM 8.80
    C881 for CRM 8.81
    ```

3. When prompted for Group Number, enter the two-digit group number to report on, or enter *0* to see the comments for all groups.

Using the Comparison Process

This appendix discusses:

- Understanding the Comparison Process
- Understanding Upgrade Compare Reports

Task H-1: Understanding the Comparison Process

This section discusses:

- Reviewing Source and Target Columns
- Reviewing the Action Column
- Reviewing the Upgrade Column
- Putting it All Together

During the upgrade you run a compare process and then review the resulting reports. The compare process first compares every property of an object definition on the source database to the properties of object definitions on the target database. The PeopleSoft system tracks object changes using the contents of the PSRELEASE table, and the value of two fields, LASTUPDDTTM, and LASTUPDOPRID, used in the PeopleTools tables.

- The PSRELEASE table maintains the Comparison Release Level. This table contains rows of data for every release level at which the database has ever existed. The first column in this table, RELEASEDTTM, contains a date/time stamp identifying when each release level was "stamped." The second column, RELEASELABEL, identifies the release level. The format of a release label is *M XX.XX.XX.YYY*, where *M* is the market code, *XX* is an integer from 0 to 99, and *YYY* is an integer from 0 to 999. A release label has two parts: the PeopleSoft release number (*M XX.XX.XX*) and the customer release number (*YYY*). Each time you customize your production database, you can stamp it with a new customer release level to help you track your changes over time. You should not change any portion of the PeopleSoft release number unless specifically instructed to do so.

- The LASTUPDDTTM field in our PS*object*DEFN tables—such as PSRECDEFN, PSPNLDEFN, and so on—stores a date/time stamp of when each object was last modified.

- The LASTUPDOPRID field stores the operator ID of the user who made the modification. If PeopleSoft made the modification, the proprietary ID *PPLSOFT* is used.

Note. Maintain Security prevents you from creating an operator named PPLSOFT.

If an object definition is defined differently in the source database than in the target, the compare process will check to see whether either object definition has changed since the comparison release. If the object's LASTUPDDTTM value is greater than the RELEASEDTTM value for the comparison release level (stored in PSRELEASE), the object has changed. If the object's LASTUPDDTTM value is equal

to or less than RELEASEDTTM, the object has not changed (since the comparison release). Whether the compared object has changed or not, if it has *ever* been changed prior to the comparison release by someone other than PeopleSoft (LASTUPDOPRID <> 'PPLSOFT'), the object is identified as a customization.

After you run a compare report, you see the following information when you open an object type in the upgrade project from the Upgrade Tab of Application Designer. This is called the Application Designer Upgrade Definition window.

Task H-1-1: Reviewing Source and Target Columns

The status of each object is reported as it appears on the Source database and the Target database. The following table explains the various status types:

Status Type	Definition
Unknown	The object has not been compared. This is the default status for all objects inserted manually into a project and the permanent status of all non-comparison objects.
Absent	The object was found in the other database, but not in this one. When upgrading to a new PeopleSoft release, all of our new objects should have Absent status in the Target database and all of your new objects should have Absent status in the Source database.
Changed	The object has been compared, its LASTUPDOPRID value is *PPLSOFT*, and its LASTUPDTIME value is greater than the date/time stamp of the comparison release database. In other words, PeopleSoft modified the object since the comparison release.
Unchanged	The object has been compared, its LASTUPDOPRID value is *PPLSOFT*, and its LASTUPDTIME value is less than or equal to the date/time stamp of the comparison release database. In other words, PeopleSoft last modified the object prior to the comparison release.
*Changed	The object has been compared, its LASTUPDOPRID value is not *PPLSOFT*, and its LASTUPDTIME value is greater than the date/time stamp of the comparison release database. In this case, the customer has modified the object since the comparison release.

Status Type	Definition
*Unchanged	The object has been compared, its LASTUPDOPRID value is not *PPLSOFT*, and its LASTUPDTIME value is less than or equal to the date/time stamp of the comparison release database. In this case, the customer last modified the object prior to the comparison release.
Same	The object has been compared and is defined as the same in both databases. When an object in one database has this status, so will its counterpart in the other database. This status would never be seen when performing a database comparison because in that case, the project is only populated with objects defined differently. However, it can occur when performing a project comparison because in a project comparison, the project contents are static; the project is not repopulated based on the comparison results.

Task H-1-2: Reviewing the Action Column

The default actions for each object that you compared are reported in the Action column. The compare sets the action column based on what you need to do to make the Target database consistent with the Source. You should not change these actions. You can decide whether or not to accept each action by setting the Upgrade value. Action types include:

Action Type	Definition
Copy	Object will be added to the Target database
Copy Prop (Records and Fields only)	Object will be added to the Target database
Delete	Object will be deleted from the Target database.
None	No action will be taken on this object.

The PeopleSoft system assigns one of these action types to every object in a comparison project and in the compare reports. However, these actions are not necessarily carried out during the copy process. The value of the Upgrade column for each object makes that determination.

Task H-1-3: Reviewing the Upgrade Column

The Upgrade values for each object – YES or NO – determine whether the object action will be carried out during the copy process. The upgrade orientation you assign during the compare process determines these settings. You can orient the Upgrade to keep PeopleSoft changes or to retain your changes in the target database. Whichever orientation you choose, you will still have the option to set each Upgrade value individually before launching the copy process.

You may find that after the compare process, your project contains objects that show up as Unchanged on the Demo database and Changed on the Copy of Production and the Upgrade column is not checked. What this status combination means is that the PeopleSoft object on your Copy of Production was changed more recently than on the Demo database. In these instances, PeopleSoft recommends that you accept the Demo database version of the object.

Task H-1-4: Putting it All Together

The following chart summarizes every possible Status, Action, and Upgrade value that could be set by the compare process to a single object:

Source Status	Target Status	Action	PeopleSoft Vanilla	Keep Customizations
(Any)	Absent	COPY	YES	YES
Absent	Changed or Unchanged	DELETE	YES	YES
	Changed* or Unchanged*	DELETE	NO	NO
Changed	Changed or Unchanged	COPY	YES	YES
	Changed* or Unchanged*	COPY	YES	NO
Unchanged	Changed	COPY	NO	NO
	Unchanged	COPY	YES	YES
	Changed* or Unchanged*	COPY	YES	NO
Changed*	Changed or Unchanged	COPY	NO	YES
	Changed* or Unchanged*	COPY	YES	YES
Unchanged*	Changed or Unchanged	COPY	NO	YES
	Changed*	COPY	NO	NO
	Unchanged*	COPY	YES	YES

Task H-2: Understanding Upgrade Compare Reports

This section discusses:

- Reviewing Report Columns
- Using Reports

When you run the compare process, it creates reports to help you understand what objects differ between the Source and Target databases, and how they differ. If you have documentation of your database modifications, you should retrieve it before reviewing these reports. This will help you understand how the Target objects

have changed and enable you to better compare the Target version of the object with the Source version. If you are upgrading to a new PeopleSoft release, you should also review the Release Notes for your product. These notes will identify and explain object changes in the New Release Demo database.

Upgrade reports can be a little intimidating at first glance, until you understand what data you are looking for and how best to use it. This section includes information to help you use the reports.

Task H-2-1: Reviewing Report Columns

For the most part, the columns in upgrade reports correspond with the columns you see in Application Designer's upgrade definition window. Moving from left to right, you see the Name of the object, then other key columns that vary by object type, then the Source and Target status, the Action value and Upgrade flag (*Yes* or *No*).

After these columns are three more that are not included in Application Designer. The first is Attribute. This tells you the type of difference that was found between the two objects. For example, record field Attribute values include *Use/Edit*, which identifies key or audit differences, and Default Field Name (*Def. Fldnm*), which identifies differences in a default value. Lastly, there is a Source column and a Target column. These wide columns display the actual differences between the object definitions. For example, on a *Use/Edit* attribute recfield difference, the Source column might contain *Xlat Table Edit* while the Target column is empty. This means the Source record field has a translate table edit while the Target record field does not.

If you are unsure of the meaning of any value in the last three report columns, open the PeopleTool that edits the particular object. The values in these columns correspond directly to dialog options in the tool.

Task H-2-2: Using Reports

Oracle delivers several cross-reference reports that you can run to provide information about the inter-relationships between various objects. Oracle delivers these reports in the form of SQRs (found in PS_HOME\SQR), Crystal Reports (found in PS_HOME\CRW\ENG), and Queries.

The cross-reference reports include:

Object Type(s)	Report Name	Report Description
Applications and Fields	XRFAPFL	Lists all application windows, such as General Tables, in alphabetical order, as well as the fields within each window. For each field, the report details the Field Name, Field Type, Length, and Format, as well as all the record and page definitions that contain the field (within the window).
Fields Referenced by PeopleCode Programs	XRFFLPC	Lists all PeopleCode programs in alphabetical order by associated record definition/field. The report includes type of field and lists all fields referenced in the PeopleCode program.
Fields and Panels	XRFFLPN	Lists all fields in alphabetical order. The report includes the names of all record and page definitions in which each field is used, as well as the Long Name of each field.

Object Type(s)	Report Name	Report Description
Records and Fields	XRFFLRC	Lists all fields in alphabetical order. The report details the Long Name, Field Type, Field Length, and Formatting specified for the field, and includes the names of all record definitions that contain the field.
Field Listing	XRFIELDS	Lists all fields in alphabetical order. The report includes Field Type, Length, Format, Long Name and Short Name.
Menu Listing	XRFMENU	Lists application windows in alphabetical order. The report details all menus within each window, and all page definitions within each menu. It also includes the associated search record definition name and detail page definition name.
Panel Listing	XRFPANEL	Lists all page definitions in alphabetical order.
PeopleCode Programs and Field References	XRFPCFL	Lists record definitions that contain fields with PeopleCode program attributes. The report includes the Field Name, as well as the associated record definitions and fields referenced in the PeopleCode program.
Panels with PeopleCode	XRFPNPC	Lists all pages that contain fields with PeopleCode attributes. For each page, the report includes the name of the record definition(s) that contain the field as well as the Field Name and Type.
Fields and Records	XRFRCFL	Lists all fields in alphabetical order by associated record definition name. The report details the Long Name, Field Type, Field Length, and Formatting specified for the field.
Records and Panels	XRFRCPN	Lists all record definitions in alphabetical order. The report includes the menu and page definitions associated with each record definition.
Window Listing	XRFWIN	Lists all application windows in alphabetical order.

In addition to using our standard cross-reference reports, you can also generate ad hoc reports to extract the exact combination of information you need. Or, you can create permanent custom reports for information you extract on a regular basis.

Oracle recommends that you mark your upgrade reports using a color-coding system to help you quickly identify what you need to do to certain objects.

If you have several people reviewing sections of the reports, a good documentation policy is to have everyone on your review cycle initial and date the action defaults and overrides they select.

You may also find it easier to change some objects manually after the upgrade, rather than copying the new versions from the source.

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