
PeopleSoft Enterprise HRMS and Campus Solutions 8.9 Maintenance Pack 1 to 9.0 Upgrade

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PeopleSoft Enterprise HRMS and Campus Solutions 8.9 Maintenance Pack 1 to 9.0
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 Oracle's PeopleSoft Enterprise products and documentation, including 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 Oracle/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 onsite 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 training before performing this upgrade.

See Oracle/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

Oracle provides additional information that may help with your upgrade. The following information (as well as updates to our upgrade) is available on Oracle/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 Documentation.* The upgrade documentation on Customer Connection contains information posted after shipment of this release that may not be included in these upgrade instructions. This information may include updates and fixes required at upgrade. Always check the upgrade documentation 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 on Customer Connection for updates to the upgrade instructions. We continually post updates as we refine the upgrade process.

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

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
- Running Upgrade Planning Scripts
- Updating Statistics
- Running Initial Audit Reports
- Verifying Global Payroll
- Running Application Audits
- Preparing Approvals for Upgrade
- Preparing the Benefits Upgrade
- Auditing Global Payroll Settings
- Making Functional Decisions
- Reporting Row Count for Tables
- Preparing Your Database
- Backing Up Demo Databases
- Renaming Records and Fields
- 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.”

- Tax Update Status for Payroll Sites

PeopleSoft HRMS 9.0 is current through Tax Update 06-D.

Oracle recommends that you run your upgrade using your Copy of Production at the same Tax Update level as the HRMS New Release Demo database. If your New Release Demo database is not at the same Tax Update level as listed above, follow the recommendations in the appendix “Upgrading with Tax Updates.”

Note. If you are unsure of what tax update level you are on, from your Copy of Production select Set Up HRMS, Product Related, Payroll for North America, Tax Table Reports, Tax Update, and note the latest date that is listed.

- Upgrading Approvals for Job Openings and Job Offers

This upgrade will not upgrade the approvals for job openings and job offers. To upgrade your approvals after completing this upgrade, see Customer Connection for the Approval Documentation. If you do not want to use the documentation from Customer Connection, all job openings and job offers must already be approved or not started before beginning this upgrade.

- **Reviewing HRMS Record Changes**

Many record changes in the new PeopleSoft release will affect the data in your system. These changes will be made through data conversion. To fully understand these changes, please review the appendixes referenced below.

See Appendix: “Reviewing Benefits Changes.”

See Appendix: “Reviewing HRMS Changes.”

- **Upgrading Time and Labor Rules**

Your custom Time and Labor Rules will be manually recompiled during your initial upgrade pass only. You should not create any new custom rules in your production database after you have created your Copy of Production database for the initial pass until after you have completed your final Move to Production and have gone live with the new PeopleSoft release. If you do create new Time and Labor Rules in production, you should manually create them again in your upgraded Copy of Production database from the previous pass before starting your next pass. This is the database that will be the source database for your Move to Production pass.

- **Reviewing Time and Labor Integration with Absence**

If you use Time and Labor with Absence Management, make sure you read the appendix “Reviewing Time and Labor Integration with Absence” to understand how the integration has changed technically and functionally.

- **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 Appendix: “Sizing Tables for the Upgrade.”

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_HC89.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 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, then click Search.
3. On the Pages tab, select or insert the menu *UPG_DEFINE_DEFAULTS* and click Edit Components.
4. Select all of the items in the menu.
5. Click OK.
6. Click Save.
7. Select PeopleTools, Security, Permissions and Roles, Permission Lists.
8. Select the permission list for the users that review and set up functional requirements for the upgrade.
9. Select the Query tab.
10. Select Access Group Permissions.
11. Add one row with the tree name *UPG_QUERY_TREE* and the access group *UPG_ACCESS_GROUP*.
12. 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
```

Properties

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

Task 1-5: Running Upgrade Planning Scripts

This section discusses:

- Understanding Running Upgrade Planning Scripts
- Exporting Planning Messages and Strings
- Importing Planning Messages and Strings

Understanding Running Upgrade Planning Scripts

In this task, you run scripts that will load data needed to complete the task Making Functional Decisions later in the upgrade.

Task 1-5-1: Exporting Planning Messages and Strings

This script loads messages and strings needed for the Upgrade Planning Pages. The script name is PUHCUPS10E.DMS.

Properties

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

Task 1-5-2: Importing Planning Messages and Strings

This script loads messages and strings needed for the Upgrade Planning Pages. The script name is PUHCUPS10I.DMS.

Properties

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

Task 1-6: 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 1-7: Running Initial Audit Reports

This section discusses:

- Understanding Running Initial Audit Reports
- Run the Initial DDDAUDIT Report
- Run the Initial SYSAUDIT Report

- Create the INITIALAUD 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 1-7-1: Run the Initial DDDAUDIT Report

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

In this step, DDDAUDIT 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 1-7-2: 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 1-7-3: Create 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.

Note. If your old PeopleTools release is 8.44 or later, this step can be automatically run by Change Assistant. To run this step automatically, open the step properties for this step in Change Assistant and change the type from ManualStop to CreateProject. Then run your job.

To create the INITALTAUD project:

1. Launch 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 1-7-4: Run the Initial Alter Audit

To verify that the PeopleTools definitions are synchronized with the underlying SQL data tables in your database, run the 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 PeopleTools definitions to identify inconsistencies. Alter Audit then creates SQL scripts with the data definition language (DDL) changes that are required to synchronize your database with the PeopleTools definitions.

Properties

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

Task 1-7-5: Review the Initial Audits

In this step, you review the audits you that 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 INITIALTAUD_ALTTBL.SQL, INITIALTAUD_CRTIDX.SQL, and INITIALTAUD_CRTTRG.SQL. These scripts contain SQL that corrects any discrepancies between your 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 1-8: Verifying Global Payroll

Complete this step if you have Global Payroll installed.

As part of performing the upgrade process, it is important that all Payroll activities are in a state of completion. Verify that all calendar group IDs were finalized, and that any payroll dependent interfaces were also processed; such as transactions sent to Banking, General Ledger, or other third-party vendors. Also, make sure that you do not have any packages that are in the process of being upgraded from one database to another. All packager-related processing needs to be completed before starting the upgrade process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll Core	All	All

Task 1-9: Running Application Audits

This section discusses:

- Running Upgrade Reports
- Correcting Garnishment Payee Data
- Running the Pending Absence Data Report

Task 1-9-1: Running Upgrade Reports

This section discusses:

- Running Upgrade Reports
- Running the US Custom Garnishment Rules Audit Report
- Running the Institution Report for France

Running Upgrade Reports

In this step, you run upgrade reports that list erroneous data that you need to clean up before starting the upgrade.

To run the application audit reports:

1. From your web browser, sign in to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Reports.
3. Select the appropriate reports.

Note. Reports are identified and explained in the remainder of this task. You will need to perform this step for all reports identified below.

4. Select Add a New Value.

5. Enter the run control *UPGRADE*.
6. Click the Run button.
7. Click the Process Monitor link to monitor the program's process.
8. Repeat the steps above for all reports identified in the remainder of this task.

Running the US Custom Garnishment Rules Audit Report

Run the U.S. Custom Garnishment Rules Audit Report, PUPYT04.SQR.

This report has the same layout as the Garnishment Rules Report, except it lists only U. S. rules maintained by you.

If there are any rules listed in this report, you have two options:

- You may decide that you no longer need the custom rule, in which case you will have to update all active garnishment orders to replace your rule with another rule later in the upgrade.
- You may decide that you still need your custom rule, in which case you will have to re-create that rule later in the upgrade.

If there are no rules listed in this report, you do not have any U. S. custom garnishment rules and do not have to take any action.

See Appendix: "Understanding Garnishments Changes."

Running the Institution Report for France

Run the Institution Report for France, PUFRS01.SQR.

Run this report if you have implemented Human Resources for France. This report lists institutions associated with more than one pension code.

A given institution should be attached to only one pension code. In the current application, the institutions listed in this report are attached to several pension codes.

To update the Pension/Contingency Funds definitions:

1. Select Set Up HRMS, Product Related, Workforce Monitoring, Regulatory Requirements FRA, Pension/Contingency Funds.
2. On the Pension/Contingency Funds page, review the Pension/Contingency Funds definitions and remove any duplicate institution names so that each institution name appears in only one Pension/Contingency Funds definition.
3. Rerun the report to verify that all institutions are attached to only one pension code.

Properties

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

Task 1-9-2: Correcting Garnishment Payee Data

This section discusses:

- Understanding Garnishment Payee Data

- Running the Garnishment Payee Audit Report
- Updating Garnishment Orders
- Updating Payee Information in the Payee Table

Understanding Garnishment Payee Data

If you are using AP Interface and running the Extract Non-Tax Deductions program, you have to ensure that the payee defined in the active garnishment order is set up in the Payee Table. The extract program will not be able to create an invoice if the payee is missing from the Payee Table.

To verify garnishment payee data, you should run the Garnishment Payee Audit report.

The report has two sections:

- Active garnishment orders (orders with the status Approved or Received)
- Inactive garnishment orders (orders with any status other than Approved or Received)

If there are any active orders listed in the report, you will have to correct the data. You can correct the data either by correcting the payee data on the garnishment order, or you can add payee information to the Payee Table.

If there are any inactive orders listed in the report, you can decide either to leave the data as is, or to correct the data. Leaving inactive orders without updating them is acceptable. Inactive orders will not be processed after the upgrade; therefore, you will not need to create an invoice. However, if you decide to correct the history, you can proceed with updates the same way as for active orders.

If there are no orders listed in the report, your data is clean and you do not have to take any action.

See Appendix: “Understanding Garnishments Changes.”

Running the Garnishment Payee Audit Report

Run the Garnishment Payee Audit Report, PUPYT03.SQR.

This report lists all garnishment orders with a payee that does not exist in the Payee Table.

To run the Garnishment Payee Audit Report:

1. From your web browser, sign in to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Reports.
3. Select the Garnishment Payee Audit Report
4. Click the Run button.
5. Click the Process Monitor link to monitor the program’s process.

Updating Garnishment Orders

To update an order with the correct payee data:

1. From your web browser, sign in to the Copy of Production database.
2. Select Payroll for North America, Employee Pay Data <country>, Deductions, Create Garnishments where country is, for example, CAN, USA, or USF.
3. Enter the employee ID and the company from the report.
4. Click Search.

5. If there is more than one garnishment order for the same employee, select the row with the garnishment ID from the report.
6. Click the Garnishment Spec Data 2 tab.
7. Update any of the following fields: SetID, VendorID, or Address.
8. Click Save.
9. Repeat steps 3 – 8 for each garnishment order you want to update.

Updating Payee Information in the Payee Table

To add payee information to the Payee Table:

1. From your web browser, sign in to the Copy of Production database.
2. Select Set Up HRMS, Product Related, Payroll for North America, Garnishments, Payee Table.
3. Select the Add a New Value tab.
4. Enter the SetID and VendorID from the report.
5. Click Add.
6. Enter all required information for the payee you are setting up.
7. Click Save.
8. Repeat steps 3 – 7 for each payee you want to add.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Payroll for North America	All	All

Task 1-9-3: Running the Pending Absence Data Report

This section discusses:

- Understanding the Pending Absence Data Report
- Running the Pending Absence Data Audit Report
- Running Time Administration

Understanding the Pending Absence Data Report

In this step, you run the pending Absence data audit report. This step applies only if you use Time and Labor and you have North American Payroll Employees. This report runs the SQR PUTLK01.

For information about changes resulting from the integration of Time and Labor with Absence Management, see the appendix “Reviewing Time and Labor Integration with Absence.”

Running the Pending Absence Data Audit Report

To run the pending Absence data audit report:

1. From your web browser, sign in to the Copy of Production database.

2. Select Set Up HRMS, Upgrade, Reports, Pending Absence Data Report.
3. Click Add a New Value.
4. Enter the run control *UPG_TL_ABSENCE*.
5. Click Run.
6. Click the Process Monitor link to monitor the program's process.

If there are any pending absences, you need to run Time Administration. If you see any data in the pending Absence data SQR report, this indicates that there are absences that have been reported and Time Administration has not been run. You need to run Time Administration for the employees and for the dates that show in the report, by following the steps below. Make sure you have access to run Time Administration.

Running Time Administration

To run Time Administration:

1. Select Time and Labor, Process Time, Request Time Administration.
2. Click Add a New Value.
3. Enter the run control *UPG_TL*.
4. Add the employees in the SQR report.
5. Enter the end date.
6. Click Run.
7. Click the Process Monitor link to monitor the program's process.

Once the Time Administration process has run to completion, run the SQR again, following the steps in Running the Pending Absence Data Audit Report above.

If you still see data in the SQR report, you need to run Time Administration again. If you run Time Administration again, you can enter the run control or select *UPG_TL* from the list of run control IDs. Perform as many iterations as needed, until there is no more data in the SQR report.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Time and Labor	All	All

Task 1-10: Preparing Approvals for Upgrade

This section discusses:

- Understanding Approvals Upgrade
- Upgrading Appraisal Approvals
- Completing eProfile Approvals
- Completing ePerformance Approvals

Understanding Approvals Upgrade

You will have to complete all ePerformance approval transactions and eProfile Promotions, transfers, and reporting changes currently in process before upgrading to the new Approvals Framework.

Task 1-10-1: Upgrading Appraisal Approvals

Appraisals that have been created but not submitted and use one of the delivered rule sets for approval will be upgraded to the new Approvals Framework. The upgrade will update these appraisal records, as well as any others that have not been submitted, to use the new framework when submitted for approval.

During the upgrade, the new release approving manager user list will be set to the equivalent old release direct reports access type used for EP_APPRAISAL_ORG. This upgrade will only take place if one of the following access types is configured:

- By SupervisorId
- By Department Manager
- By Reports To Position
- By Part Posn Mgmt Supervisor
- By Part Posn Mgmt Dept Mgr

If you have configured your transaction to use “By Department Security Tree” or “By Group Id,” the approving manager user list will not be updated, since these access types will not be pre-configured for the approval framework.

Transactions that have been created but not submitted and use a customized rule set will not be upgraded, but we will deliver some documentation and unsupported starting SQL that will explain what you may want to do to upgrade these customized rule sets. These SQL statements will not be supported for upgrade or otherwise. In order to upgrade customized rule sets, you will need to complete the following steps.

To upgrade customized rule sets:

1. Determine whether the delivered transaction registry for ePerformance can be used instead of the customized rule set.
2. Determine whether the delivered approval process definitions for ePerformance can be used instead of the customized rule set.
3. If the answer to either of the above steps is *no*, then you must create the objects for them.

Once this is done, you will run SQL statements to update EP_TMPL_DEFN, EP_REVIEW_TYP_TBL, and EP_APPR to set the new values for the approval process definition (PTAFDEFN_ID).

Properties

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

Task 1-10-2: Completing eProfile Approvals

You need to complete approvals, promotions, transfers, and reporting changes currently in process before upgrading to the new release. In this step, you run a series of queries to determine which transactions need to be completed and then complete them. If you do not complete these transactions, the data cannot be added to the new approval framework. For instructions on completing these transactions, see your current release eProfile PeopleBook.

To run the eProfile Approvals query reports:

1. Select Reporting Tools, Query, Query Manager.
2. Run the following query reports:
 - UPG_EL_PROMOTIONS to determine which promotions need to be completed or cancelled.
 - UPG_EL_TRANSFERS to determine which transfers need to be completed or cancelled.
 - UPG_EL_REPORTINGS to determine which reporting changes need to be completed or cancelled.

See *PeopleSoft Enterprise eProfile 8.9 PeopleBook*.

Properties

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

Task 1-10-3: Completing ePerformance Approvals

You need to complete approvals currently in process before upgrading to the new release. In this step, you run a query to determine which transactions need to be completed and then complete them. If you do not complete these transactions, the data cannot be added to the new approval framework. For instructions on completing these transactions, see your current release ePerformance PeopleBook.

To run the ePerformance Approvals query report:

1. Select Reporting Tools, Query, Query Manager.
2. Run the following query report:

UPG_EP_APPROVALS

See *PeopleSoft Enterprise ePerformance 8.9 PeopleBook*.

Properties

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

Task 1-11: Preparing the Benefits Upgrade

This section discusses:

- Preparing Benefits Administration
- Preparing COBRA Administration

Task 1-11-1: Preparing Benefits Administration

This step is performed by the Benefits Administrator. Run this step if you are licensed for PeopleSoft Benefits Administration.

You need to create events for all pending data changes that could affect Benefits eligibility because data conversion cannot convert pending data change "triggers." To create events, perform a single Event Maintenance (EM) run (using any single arbitrary existing EM schedule; the smaller the schedule the less impact this will have on your timeline). Then review all Benefits Administration messages to ensure that all pending activity has been successfully processed to events in at least a "prepared" status. The events do not have to be finalized or closed. After running Event Maintenance, confirm that no more pending changes exist by verifying on the BAS Activity page that the BAS Activity grid is empty.

Properties

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

Task 1-11-2: Preparing COBRA Administration

This step is to be performed by the Benefits Administrator. Run this step if you are using the COBRA Administration module within Base Benefits.

You need to create events for all pending data changes that could trigger COBRA qualification because data conversion cannot convert pending data change "triggers." To create events, perform a COBRA process run. Then review all COBRA Administration messages to ensure that all pending activity has been processed to events. The events do not have to be finalized or closed. After running the COBRA process, confirm that no more pending changes exist by verifying that the COBRA Activity grid is empty on the COBRA Activity page.

Properties

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

Task 1-12: Auditing Global Payroll Settings

This section discusses:

- Understanding Global Payroll Settings
- Verifying PIN Element Numbers

Understanding Global Payroll Settings

In this task you verify your PIN Element Numbers.

Note. Complete this task only if you have Global Payroll installed.

Task 1-12-1: Verifying PIN Element Numbers

PIN (Element) Numbers in the range of 1 to 10000 are reserved for use by the PeopleSoft system. Do not create PINs in this range. In PeopleSoft 8.3, an online validation was added to the Installation table setup component to ensure that the Last Used Element Number cannot be set to a value less than 10000. Please verify that you did not create or renumber any elements so that the PIN (Element) Number is less than 10001. If you have, you need to renumber these elements (using the Packager) so that the PIN (Element) Number is greater than 10000.

Note. PeopleSoft 8.3x was shipped with the Last Element Number set to 10000. Any new elements you created would have been assigned a PIN (Element) Number above 10000. In order for you to have created or renumbered any elements where that PIN (Element) Number has a value less than 10000, you would have had to change the field PIN_NUM_LAST on the PS_INSTALLATION table via SQL.

See Also

PeopleSoft Enterprise Global Payroll 8.9 PeopleBook

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll Core	All	All

Task 1-13: Making Functional Decisions

This section discusses:

- Understanding Making Functional Decisions
- Assigning Upgrade Default Values
- Upgrading Defaults for Service Indicators

Understanding Making Functional Decisions

In this task, you choose the default values that will be assigned to fields by conversion programs during the upgrade.

Task 1-13-1: Assigning Upgrade Default Values

This section discusses:

- Understanding Upgrade Default Values
- Opening the Upgrade Defaults Dialog Box
- Assigning Profile Management Options
- Assigning HR Default Values
- Assigning Student Financials Upgrade Default Values
- Assigning Student Records Upgrade Default Values

Understanding Upgrade Default Values

This upgrade contains many new fields that need default values. In addition, current values will need to be mapped to new values. In this step, you choose your default values that will be assigned to fields by conversion programs during the upgrade. You will also structure some of the mapping to the way in which you will use the system.

Opening the Upgrade Defaults Dialog Box

To open the Upgrade Defaults dialog box:

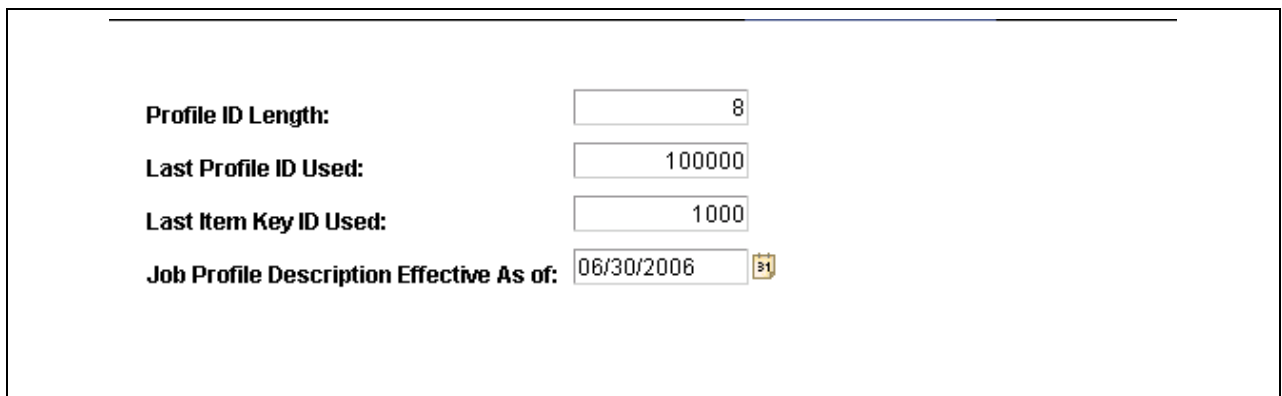
1. From your web browser, sign in to the Copy of Production database using your current release of PeopleTools.
2. Select Set Up HRMS, Upgrade, Define Defaults, Product Defaults.
The Upgrade Defaults dialog box appears.
3. Follow the instructions in the remainder of this task to complete the Upgrade Default pages.

Assigning Profile Management Options

In this step, you determine the default values to be used in data conversion for the Profile Management upgrade. If no values are supplied, the defaults described below will be applied by the conversion program.

To set Profile Management options:

1. Select the Profile Management tab.



The screenshot shows the 'Profile Management Tab' with four input fields and their current values:

Profile ID Length:	8
Last Profile ID Used:	100000
Last Item Key ID Used:	1000
Job Profile Description Effective As of:	06/30/2006

Profile Management Tab

2. In the Profile ID Length field, enter the number of characters that you will need for the new profile ID.

The default value is 6. During conversion, new auto-generated numeric profile IDs will be created for Person Profiles, Clusters, Roles, and Job Profiles. Once in production, new profiles will be assigned an auto-generated number (stored in a character field). The default value supplied is intended to accommodate all profile IDs generated during conversion as well as a vast supply of IDs once in production. The default value also accommodates characters for a prefix to be used when creating IDs in production, if designated.

If there is concern that your company will be upgrading more than 899,999 profiles, this would be a good time to increase the profile ID length, though the conversion will not error if profile IDs longer than the profile ID length specified are created. This value can be increased after the upgrade if special needs should be accommodated for profiles created while in production.

3. Set the Last Profile ID Used field to the starting number you want to use.

In the new release, Profile Management uses profile ID in a numeric sequence. The default is to start the sequence at 100,000, thus the first profile that will be created during the upgrade will have a profile ID of 100,001. You may want to start at a number other than 100,000. Set this field to the starting number you wish to use; however, be aware of the profile ID length, ensuring that the starting number you enter can accommodate profiles being converted and still remain within the profile ID length. In most cases there is no need to change this number. A valid case would be if a custom process were used import profiles from an alternative source having unique profile IDs that need to be protected.

4. Set the Last Item Key ID Used field to the starting number you want to use.



In the new release, Profile Management will assign a unique numeric ID to all items in a profile. The default is to start the sequence at 0; therefore, the first profile item created will have a starting number of 1. If you want to start with another number, set this field to that number. In most cases there is no need to change this number. A valid case would be if a custom process were used to import profiles from an alternative source having a series of IDs that need to be reserved.

5. Set the Job Profile Description Effective As Of field to the effective date that you want to use.

In the new release, the Job Profiles description field can have only one effective date per job profile. It will default to the most current effective dated description (as of the date of the conversion run). That may mean a description dated for the future. If you want this default to use a different date, set this field to the effective date that should be used (for example, *1900-01-01* if you want the oldest date or *3000-01-01* if you want the description that is the most future dated.)

Assigning HR Default Values

In the new release, the EXPIRATION_DATE field is added to the BADGE_TBL record. The EXPIRATION_DATE field also exists on the new Employee Security Clearance record, HR_EE_SEC_CLR. Application errors may occur when the expiration date is before the effective date. To avoid potential errors, specify values for the Badge Expiration Date and Security Clearance Expiration Date fields on the Define HR Defaults page.

Badge Expiration Date	<input type="text" value="06/28/2008"/> 
Security Clearance Expiration Date	<input type="text" value="06/28/2008"/> 

Define HR Defaults page

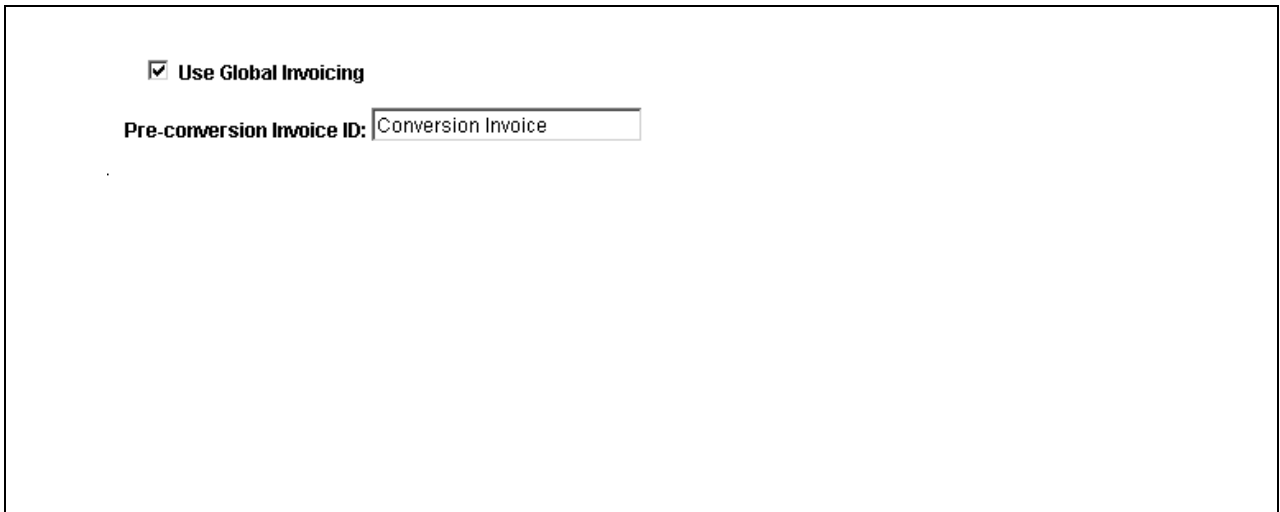
Assigning Student Financials Upgrade Default Values

In this step, you define the default values used in the Student Financials Global Invoicing conversion process.

Note. Skip this step if you do not intend to use the Student Financials Global Invoicing feature.

To assign Student Financials upgrade defaults:

1. Select the Student Financials tab.
2. Select the Use Global Invoicing check box.
3. Enter a default value in the Pre-conversion Invoice ID field.

The screenshot shows a software interface for the 'Student Financials' tab. It features a checkbox labeled 'Use Global Invoicing' which is checked. Below this, there is a label 'Pre-conversion Invoice ID:' followed by a text input field containing the value 'Conversion Invoice'.

Student Financials tab

When the Use Global Invoicing check box is selected, the Student Financials upgrade pre-populates the table `SSF_ITEM_INV` using the pre-conversion invoice ID. This table is only used to support Global Invoicing. The Student Financials Global Invoicing feature uses this new table to support Credit Invoicing and the payment by invoice ID.

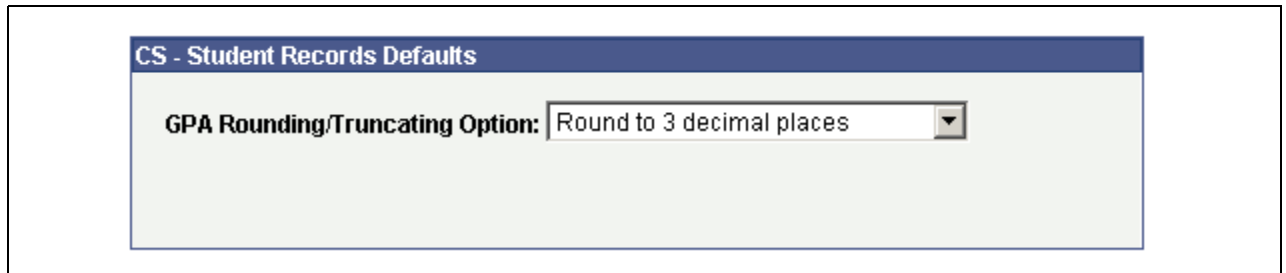
Assigning Student Records Upgrade Default Values

In this step you define the default values used in the Student Records upgrade.

The option to round or truncate GPA fields in Student Records (`PS_STDNT_CAR_TERM`) is now available in PeopleSoft 9.0. In previous releases, this was done by hard coding in COBOL and Peoplecode programs. Because new GPA fields are added in Student Records (`PS_STDNT_CAR_TERM`) in PeopleSoft 9.0, the upgrade process requires that you identify how GPA rounding or truncating is done at your installation. This will ensure that the new GPA fields are rounded or truncated the same way as the old GPA fields. Note that the upgrade is only going to calculate GPA values for the new fields.

To assign Student Records defaults:

1. Select the Student Records tab.



Student Records tab

2. Select the appropriate GPA rounding option from the GPA Rounding/Truncating Option drop down list box.

The rounding/truncation option value you define in this step must be consistent with how you have rounded or truncated in the past. For example, if you have been rounding the GPA fields using 2 decimal positions, you must select “Round to 2 decimal places” in this option.

Properties

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

Task 1-13-2: Upgrading Defaults for Service Indicators

This section discusses:

- Reviewing the Service Indicator/Impact Report
- Upgrading Defaults for Service Impacts
- Upgrading Defaults for Service Indicator Codes
- Upgrading Service Indicator Code and Impact Associations

Reviewing the Service Indicator/Impact Report

A new attribute, Basis of Impact, has been added to the Service Impact definition. Basis of Impact indicates whether a given impact takes effect based on date, term, or both. This new attribute, combined with the new End Date and End Term fields and the standardization of Term field usage in service indicator assignments, requires that you assess current Service Impact and Service Indicator Code associations to determine the proper upgrade strategy.

See Appendix: “Understanding Service Indicator Changes.”

To assist with this assessment, the Pre-Upgrade Service Indicator report, PUCCR10, is provided. This report lists the impacts defined in your implementation and the Service Indicator codes with which those impacts are associated. To determine the appropriate upgrade strategy, you will need to apply your knowledge of your institutional usage of the impacts and codes.

To run the Service Indicator/Impact report:

1. Select Set Up HRMS, Upgrade, Reports, Pre-Upgrade Service Indicator.
2. On the run control page, click Run to run the report.
3. Review the Pre-Upgrade Service Indicator report.

Upgrading Defaults for Service Impacts

For each defined impact, you must select a basis of impact (date, term, or both) based on your analysis of how the impacts are used. You must select the basis of impact for all impacts for all institutions for which you have Service Impacts defined.

To upgrade Service Impact defaults:

1. Select Set Up HRMS, Upgrade, Define Defaults, Upgrade Service Indicators.

The screenshot shows the 'Upgrade Service Impact' tab. At the top, there are two tabs: 'Upgrade Service Impact' (selected) and 'Upgrade Service Indicator Code'. Below the tabs is a search bar for 'Institution' with 'PSUNV' entered. Below the search bar is a table titled 'Impacts'. The table has columns: 'Impact', 'Description', 'Term', and 'Date'. Each row has checkboxes for 'Term' and 'Date' to indicate the basis of impact.

Impact	Description	Term	Date
ACCES	Disabled Access Privilege	<input type="checkbox"/>	<input checked="" type="checkbox"/>
AENR	Allow drop only; no add actvty	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
AWARD	Award Financial Aid	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BILL	Receive a Bill	<input type="checkbox"/>	<input checked="" type="checkbox"/>
BILLS	No Bill	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CASH	Cash Check	<input type="checkbox"/>	<input checked="" type="checkbox"/>
CENR	Block All Enrollment Actvty	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CHECK	Pay with Check at Cashier	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Upgrade Service Impacts tab

2. On the Upgrade Service Impact tab, enter a value in the Institution field.
3. For each impact listed in the Impacts section, select either the Term or Date check box, or both, to indicate the basis of impact.
4. Repeat steps 2 and 3 for each institution for which you have Service Impacts defined.

Upgrading Defaults for Service Indicator Codes

To accommodate the exposure of Service Indicator functionality to external organizations in PeopleSoft 9, a new attribute has been added to the Service Indicator Code definition that allows you to decide whether to use a Service Indicator code with Persons, or Organizations, or both. If a Service Indicator code is not marked for usage with an entity type, it will not be available in the Service Indicator Code prompt for that entity type.

For example, if Service Indicator Code SF9 has the *Person* check box selected, but not the *Organization* check box, then when you add a new Service Indicator for an organization, SF9 will not appear in the prompt as a valid Service Indicator that can be assigned.

You must define your Service Indicator Code upgrade defaults for each institution for which you have Service Indicator codes defined.

To upgrade Service Indicator code defaults:

1. Select Set Up HRMS, Upgrade, Define Defaults, Upgrade Service Indicators.

Upgrade Service Impact | **Upgrade Service Indicator Code**

Service Indicator Codes Find | View All First 1 of 1 Last

Institution: PSUNV

Codes Customize | Find | View All First 1-7 of 45 Last

Service Indicator Cd	Description	Person	Organization
ALL	All Services Hold	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ANO	Anonymous	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B01	No Bill Created	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BIL	Billing Indicator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
C01	Conference Guest	<input checked="" type="checkbox"/>	<input type="checkbox"/>
CMP	Campaign 2000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DEP	Enrollment Deposit	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Upgrade Service Indicator Code tab

- On the Upgrade Service Indicator Code tab, enter a value in the Institution field.
- For each Service Indicator code listed in the Codes section, select either the Person or Organization check box, or both.
- Repeat steps 2 and 3 for each institution for which you have Service Indicator codes defined.

Note. If a Service Indicator Code does not have either the Persons or Organizations check box selected, it will not show up in either prompt.

Upgrading Service Indicator Code and Impact Associations

As noted above, because of changes to the Service Indicator functionality intended to make interpretation of values consistent across products, you will need to make decisions about Service Indicator code and impact associations and other Service Indicator values in order to ensure that the functional intent of upgraded assigned Service Indicators remains the same in PeopleSoft 9 as it was in the source release.

Note. You must define upgrade defaults for Service Impacts and Service Indicator codes before you can upgrade Service Indicator code and impact associations.

You must define the Service Indicator code and impact association upgrade defaults for each institution for which you have Service Indicator codes defined. For each Service Indicator code for a selected institution, you must make choices in three areas:

- Service code and impact associations
- Upgrade target value for End Term
- Upgrade value for use of Active Term = 9999

To upgrade Service Indicator and impact associations:

- Select Set Up HRMS, Upgrade, Define Defaults, Upgrade SI Codes/Impacts.

- On the Search page, select the institution for which you want to define Service Indicator code and impact upgrade defaults.

Upgrade Service Indicator Code/Impacts

Institution: PSUNV

Service Indicator Code/Impacts Find | View All First 46 of 53 Last

Service Indicator U03 Upgrade Org SI3 2001 **Map:**

Cd: ☐ Direct ☒ Split

Effective Date: 12/31/2001

Impacts	Basis of Impact
BILL	<input type="checkbox"/> Term <input checked="" type="checkbox"/> Date
OOT	<input checked="" type="checkbox"/> Term <input type="checkbox"/> Date
PAYMN	<input type="checkbox"/> Term <input checked="" type="checkbox"/> Date

Map To Find | View All First 1 of 1 Last

Code: **End Term Equals:** ☒ Blank ☐ Start Term **Convert '9999' to:** 9999

Description:

Impacts	Description
Impact	Description

Upgrade Service Indicator Code/Impacts page

For each effective dated row for a source Service Indicator code, the impacts associated with that code are displayed. In addition, each impact displays the basis of impact that was selected in the step Upgrading Defaults for Service Impacts. This will help you identify “mixed usage” cases.

- To associate a Service Indicator code with the impacts, under Map select the method of mapping the code, either Direct or Split.

Direct mapping will copy the code definition to the upgrade target without changes. Split mapping provides an opportunity to reassociate impacts with codes (existing or new), depending on your institutional usage, in order to retain the original assignment intention based on the new structures. If a Service Indicator code does not have any associated impacts, the Map option will default to Direct and will not be active.

Note. If you add new Service Indicator codes by splitting codes, the new Service Indicators (Institution, Code, and Reason) and their security settings (Place and Release) will be added to each relevant user’s Service Indicator security profile in a manner identical to the source row.

- For End Term Equals, select the Start Term option to populate the new End Term field with the value from Start Term, or select the Blank option to leave the End Term field blank.

Note. For details about the historical usage of Active Term and new validity period logic in PeopleSoft 9, as well as examples of upgrade scenarios, see Appendix: “Understanding Service Indicator Changes.”

- For Convert '9999' to, select whether to convert the Active Term value of 9999 to a Start Term value of 0000 or 9999.

Note. For details about the historical usage of the Active Term value of 9999 and examples of upgrade scenarios, see Appendix: “Understanding Service Indicator Changes.”

- Repeat steps 3 through 5 for each Service Indicator code for the selected institution.
- Repeat steps 2 through 6 for each institution for which you have Service Indicator codes defined.

Properties

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

Task 1-14: 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 1-15: 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 PeopleTools upgrade. These steps prevent errors in tasks later in the upgrade.

Task 1-15-1: 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 1-15-2: 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 1-15-3: Drop PeopleTools Tables

In this step, you drop 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 1-15-4: Shrink Images

If you have customized images stored in your database, you may need to shrink these images before updating 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 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 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), IMAGE SIZE 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(IMAGE SIZE) IMAGE SIZE FROM PS_CONVIMG WHERE⇒
  DBMS_LOB.GETLENGTH(IMAGE SIZE) > 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 1-15-5: 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:

```
APPMMSGPURGEALL.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 1-16: Backing Up Demo Databases

This section discusses:

- Backing Up Copy of Current Demo
- Backing Up New Release Demo

Task 1-16-1: 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 1-16-2: 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 1-17: Renaming Records and Fields

This section discusses:

- Understanding Renaming Records and Fields
- Running the RNHCUPK01 Script
- Retaining the Target Rename Log Files
- Running RNHCUPK01 Script on Copy of Current Demo

Understanding Renaming Records and Fields

During development of new releases, PeopleSoft sometimes renames records, fields, or specific occurrences of a field on a record (recfield renames). In this task, you will execute scripts to rename those same objects in your Copy of Production and in the Copy of Current Demo.

With these commands, Data Mover renames the objects in the record and field definitions in Application Designer and then logs an entry on the table PSOBJCHNG. It also changes all references to these objects in pages and PeopleCode. This will not rename the objects on the database tables at this time.

Later in the upgrade, you will generate the SQL that will alter the tables on the database. This alter process reads PSOBJCHNG and will rename these tables and fields. The SQL generated to perform that task will be different depending on the build options you select and your database platform, however the result is the same. For record renames, the old table no longer exists and the new table contains the data from the old tables. For field and recfield renames, any affected tables will contain the new column with data from the old column; the old column no longer exists on the tables.

If a field rename does not go through this process, the alter SQL will not recognize it as a rename. After the alter, both old and new columns exist on the table and a data conversion process is required to copy the data from the old column to the new. This is an important distinction to make.

Important! It is very important to resolve any errors with these rename scripts. Do not skip any lines that error. It is not possible to recover from missed renames. The consequences of skipping a rename are evident later in the upgrade when you are in the middle of running data conversion programs.

A few different things could happen: the conversion program could error because the PeopleSoft system is expecting only the new column on the table, but you have both old and new, or you may lose data. Because of the rename, the PeopleSoft system expects the data to be handled in the SQL alter process. If the data doesn't move in the SQL alter process, and you don't write a data conversion program to move the data, the process drops the old column without having copied the data to the new column.

There are several advantages to using this rename process. Any references to the renamed records or fields in your customizations will also be modified. The number of differences on the compare reports is reduced. The SQL alter moves the data from old to new efficiently and no additional data conversion steps are required.

Task 1-17-1: Running the RNHCUPK01 Script

This script will rename records, fields, and recfields on the Copy of Production database. These renames should only execute during the initial upgrade pass, not during the Move to Production passes.

Properties

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

Task 1-17-2: Retaining the Target Rename Log Files

In order to retain a copy of the log files for the preceding rename script steps run against the Copy of Production database, you must resave the logs for those steps with new file names. Otherwise, these logs will be overwritten by the following rename script steps run against the Copy of Current Demo database.

Properties

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

Task 1-17-3: Running RNHCUPK01 Script on Copy of Current Demo

The RNHCUPK01.DMS script will rename records, fields, and recfields on the Copy of Current Demo database. These renames should only execute during the initial upgrade pass, not the Move to Production passes. Run this script in Data Mover user mode.

Properties

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

Task 1-18: Comparing Customizations

This section discusses:

- Modifying Compare Report Options
- Running Compare UPGCUST
- Running UPGCUST Filter Script
- Reviewing UPGCUST Compare Log
- Restoring Copy of Current Demo

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 1-18-1: Modifying Compare Report Options

PeopleSoft Change Assistant templates are delivered with the default report filters turned on. This limits the size of the reports and keeps them manageable. Before you start the compare, review the compare options in your Change Assistant template step properties and modify them based on your specific 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, and are not written into 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 are absent from the Copy of Current Demo database. Alternatively, you can review these objects online, through Application Designer, after the database compare.

To modify the upgrade compare options:

1. Highlight the Run Compare UPGCUST step and right-click.
2. Select Step Properties

The Step Definition dialog box appears.

- Click Upgrade.

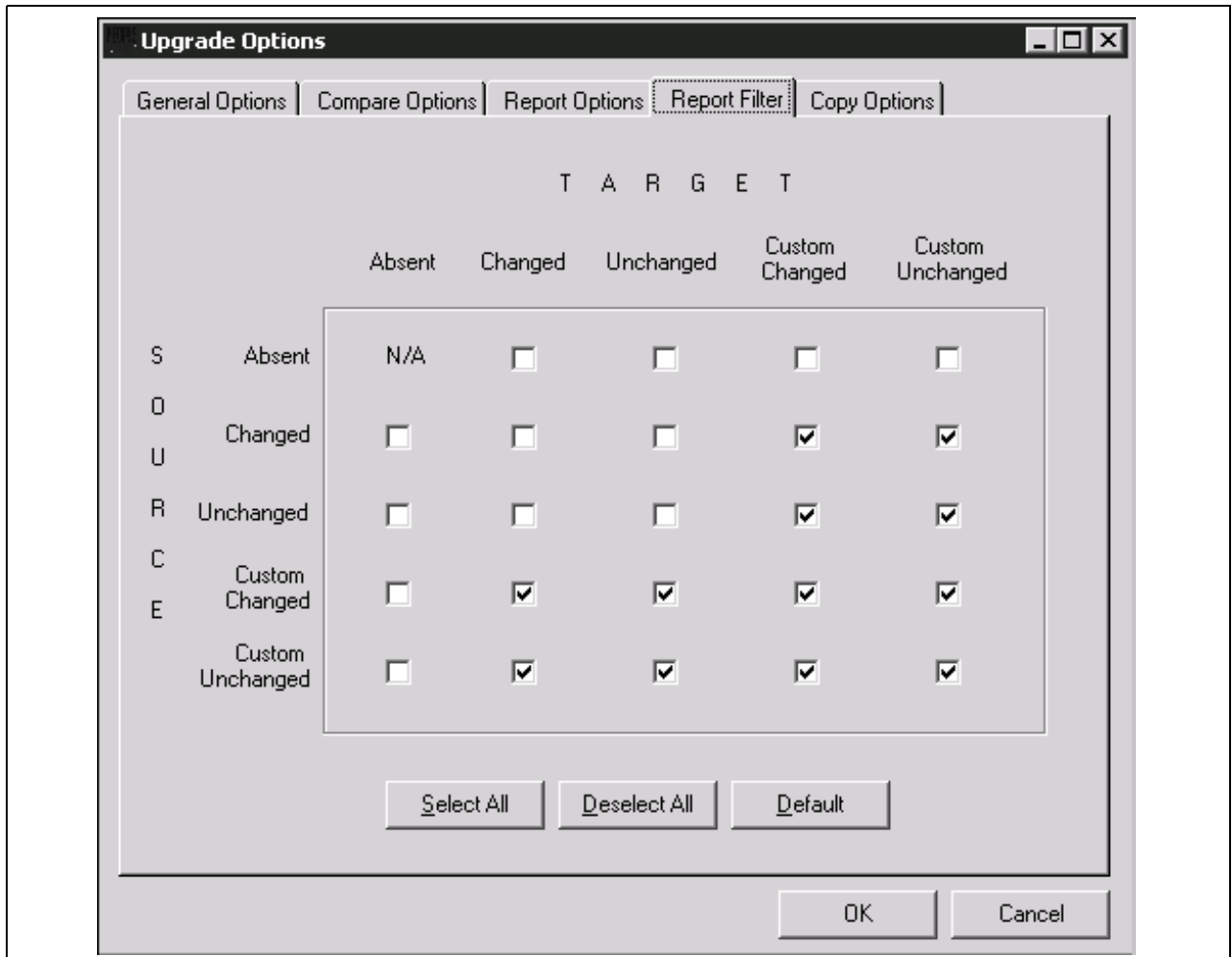
The Compare and Report dialog box appears.

- Click Options.

- Select the Report Filter tab.

The default options include your custom changes on the reports.

- Change the default options as necessary and click OK.



Upgrade Options page, Report Filter tab

- In the Compare and Report dialog box, click OK.
- In the Step Definition dialog box, click OK.
- Select File, Save Job.

Properties

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

Task 1-18-2: 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 1-18-3: 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 1-18-4: 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.

Properties

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

Task 1-18-5: Restoring Copy of Current Demo

Restore your Copy of Current Demo database from the backup taken earlier in the upgrade. The backup was taken before rename scripts ran against the Copy of Current Demo. This is done to restore the environment to an Oracle-delivered demo implementation.

Properties

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

Task 1-19: 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:

DLHCLASYSE.DMS
DLHCLASYSI.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
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 1-20: Preparing for the Application Upgrade

This section discusses:

- Creating a Copy of Translate Values
- Creating a Copy of RecField Definitions
- Dropping Student Financials Tables
- Deleting Old Pagelet Wizard Data
- Editing the System Data Swap Script
- Editing the PeopleTools Swap Script

Task 1-20-1: Creating a Copy of Translate Values

This script creates a temporary table PS_UPG_HR_XLAT_TMP containing translation values from the PSXLATITEM for the field values that will be used during the data conversion.

The script name for your path is:

PUHCHRS10.DMS

Properties

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

Task 1-20-2: 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 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	All	All

Task 1-20-3: Dropping Student Financials Tables

The individual validation of the Service Indicator in the Student Financials disbursement process has been redesigned to meet the new standards for PeopleSoft 9.0. The Service Indicator has been replaced with Service Impacts. Therefore, the DISB_RULE_ITS and DISB_RULE_SRV tables have been modified to reflect the changes. Since the Service Indicator can be attached to multiple Service Impacts, the DISB_RULE_ITS and DISB_RULE_SRV tables will not be upgraded. You are required to add the appropriate service impact to the disbursement rules.

In this step, you drop the DISB_RULE_ITS and DISB_RULE_SRV tables, which as noted above will be recreated during this upgrade.

Run the following Data Mover script from the PS_HOME\SCRIPTS directory:

PUCSSFR01.DMS

Properties

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

Task 1-20-4: Deleting Old Pagelet Wizard Data

This step is only applicable if you have already upgraded your production application to PeopleTools 8.46 or greater.

In this step, you run a script to delete the Common Component Pagelet Wizard (PW) data to ensure that when the UPGPT846PP conversion program is run subsequently, the old existing Common Components Pagelet Wizard data is not re-entered into the PeopleTools Pagelet Wizard tables. If you do not run the script, then items that were removed from the PeopleTools version of Pagelet Wizard, but still exist in the Common Components version of Pagelet Wizard, will be copied back into the PeopleTools version when the UPGPT846PP conversion program is run.

The script also updates the Common Component portal option tables with the existing values in the PeopleTools portal options tables. If you do not run the script, then changes made to the current PeopleTools options tables may be overwritten with values from the Common Components portal options when the UPGPT846PP conversion program is run. The affected values include the default registry prefix, default owner ID, and the default style sheet.

Only run the script if *both* of the following conditions are met.

- Your current production application release database is *already* on PeopleTools 8.46 or greater.
- The table PS_EOPPB_LINKPATHS exists on the Target database.

If both of the above conditions are met, then run the following script:

```
PTPPB_EOPPB.DMS
```

To run the step automatically:

1. In Change Assistant, open your upgrade job.
2. In the task Preparing for the Application Upgrade, right-click on the step Deleting Old Pagelet Wizard Data, and select Step Properties.
3. In the Step Properties dialog box, change the Type from *ManualStop* to *DataMoverUser*, and click OK.
4. Select Edit, Run.

Properties

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

Task 1-20-5: 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:

DLHCLASWAP.DMS

Properties

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

Task 1-20-6: 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 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 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 1-21: 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 PeopleTools changes. This involves updating PeopleTools system tables, copying and building PeopleTools projects, loading PeopleTools seed data, and converting PeopleTools objects. From this point forward, you run all steps using your newly installed version of PeopleTools.

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 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.

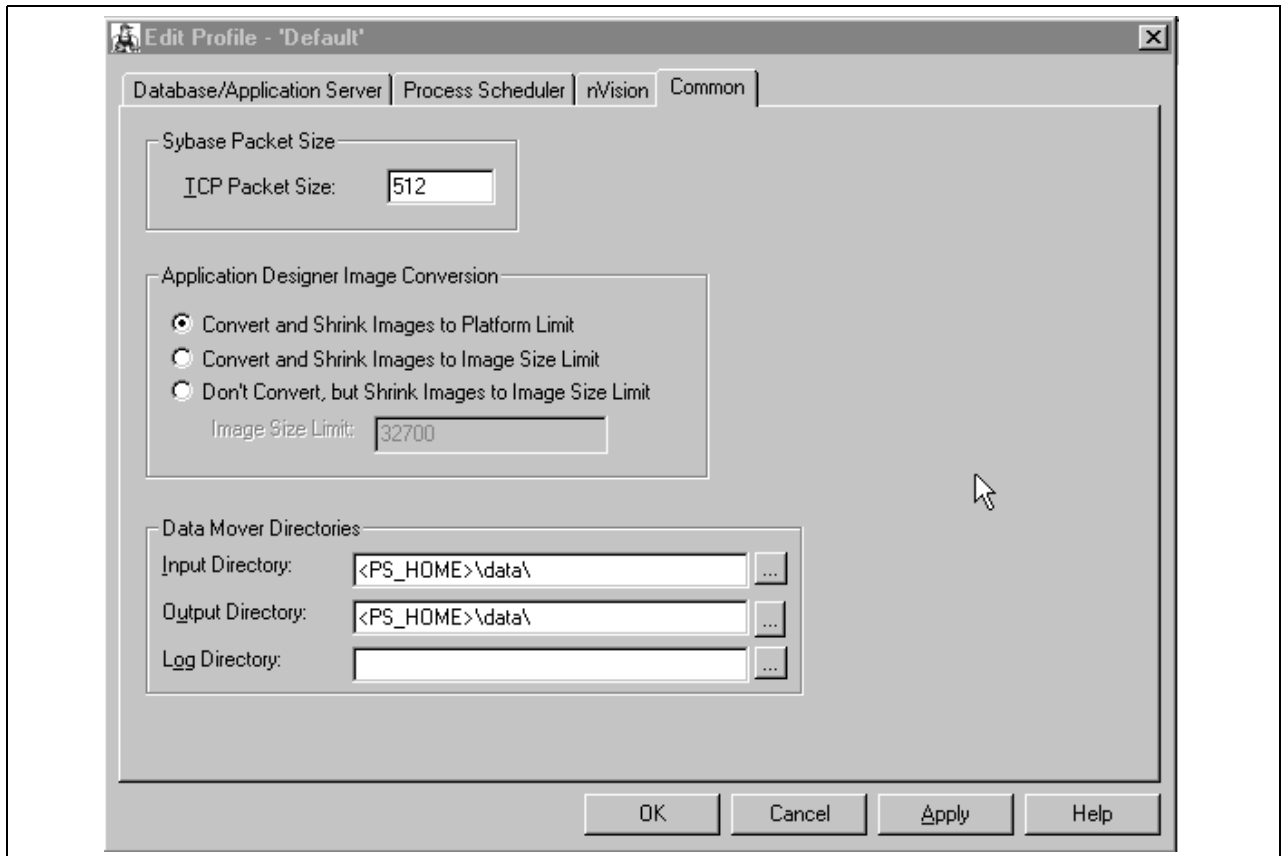
Note. Move to Production: These steps will be repeated in the Move to Production (MTP) pass. The script that you previously edited may be acceptable, or you may need to change it again if your New Copy of Production has a different security or data definition language (DDL) configuration.

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

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 that 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 RELxxxDBTSFIX.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 RELxxxDBTSFIX.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 RELxxxDBTSFIX 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 PTxxxTLS 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 PeopleTools release greater than your current 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
DLUPX96I.DMS
PT_RELEASE_IMPORT.DMS
DB2ALLCCSIDUPD.SQL
DLHCSYSI.DMS
DLHCLASYSI.DMS
DLHCHRW01.DMS
RNHCUPK02DB2.SQL
DLUPX16I.DMS
DLUPX95.DMS
DLHCUPT01I.DMS
DLHCUPT04I.DMS
DLHCUPS01.DMS
```

DLHCGCHS10I.SQL

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
MVHCPYT05I.DMS
MVHCPIT01I.DMS
MVHC89IMP.DMS
```

If you prefer, you can copy these overrides from the xxDMODBO.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 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 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 may 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 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 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 PeopleTools system tables by running various scripts.

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

Task 2-3-1: Clean Up Message Data

If you are upgrading from 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 PeopleTools 8.47 or earlier, perform this step to clean out obsolete message data. Message functionality and structure changed as of 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 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 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\PTUPGIBDEL8xx.SQL in which *xx* represents the last two digits of the 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 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 PeopleTools use.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	All	Microsoft	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 PeopleTools release. They are located in the PS_HOME\SCRIPTS directory. Release scripts can be identified by their common naming standard, RELxxx.SQL, in which xxx designates a PeopleTools release number.

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

If you created RELxxxDBTSFIX (in which xxx is a 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 = 'xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx', LICENSE_⇒
GROUP = 'xx' ;
```

where 'xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx' 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 PeopleTools patch being applied.

Note. You only need to run this step if you are applying a 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 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 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 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 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 relational database management system (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 PeopleTools 8.48 or later. The PeopleTools upgrade must be applied using the old data types as the data type conversion will occur after the 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 z/OS

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 z/OS

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

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

Warning! Do not change the delivered 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 PeopleTools projects during the upgrade, you may overwrite modifications that you have made. Excluding any PeopleTools-delivered objects from the upgrade may result in instability due to dependencies on specific objects.

To review 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 PeopleTools definitions when you copy the PeopleTools projects in a later task. You must not make any modifications that will affect 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.

PeopleSoft 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 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 PeopleTools. The PPLTLS84CUR project contains all PeopleTools objects that have been created or updated since PeopleTools 8.40 was released.

Before the copy of records and fields, the upgrade process detects if the object definition exists or not. PeopleSoft delivers the PPLTLS84CUR project 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 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 PeopleTools objects to the database that are necessary for the proper operation of PeopleTools.

Before the copy of records and fields, the upgrade process detects if the object definition exists or not. PeopleSoft delivers the PPLTLS84CURML project 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 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 PeopleTools objects to the database that are necessary for the proper operation of PeopleTools.

Before copying records and fields, the upgrade process detects whether the object definition exists. PeopleSoft delivers the PPLTLSML project 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 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 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 PeopleTools.

Note. Perform this process only if you are applying a 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 PATCH84X project from the list, in which 84X corresponds to the PeopleTools release of the patch project.

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

5. Select Options; select the languages Common and English *only*.
6. Select Copy to begin copying updated 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 PeopleTools objects to your database that are necessary for the proper operation of PeopleTools.

Note. Perform this process only if you are applying a 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 PATCH84XML project from the list, where 84X represents the PeopleTools release of the patch project.

This should correspond to the 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:

```
HCDDL.SQL (HCDDL.U.SQL for DB2 z/OS Unicode)
```

Important! For DB2 UNIX/NT sites, the script name is HCDDL.DMS.SQL for ANSI, and HCDDL.DMSU.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 relational database management system (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 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 PeopleTools. The script name is:

TABLESPACEALERTABLES.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 TABLESPACEALERTABLES.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 TABLESPACEALERTABLES.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 PeopleTools tables required for the system to execute properly. This step runs scripts conforming to the PTxxxTLS.DMS and PTxxxTLYyy.DMS naming conventions, where xxx represents a PeopleTools release number and yyy represents a three-letter language code, that are greater than your current 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 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 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 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 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/APPSEV/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 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 Iscript 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 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 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. After running PTUPGCONVERT, review the output data generated in the previous step for more details.

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 PeopleTools 8.48 or later, this task does not need to be run because the Integration Broker conversion has already been performed. You may 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 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 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 `MSSNEWTTYPE ALTER.SQL` to alter the records in the `MSSNEWTTYPE` 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.

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 \PSORADDataTypesConversion.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\PSORADDataTypesConversion.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\PSORADDataTypesConversion.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 *PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 PSORADDataTypesConversion.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 tablename, columnname, 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.

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:

- Running Drop Table Script
- Exporting Project Definitions
- Importing Project Definitions

Task 3-1-1: Running Drop Table Script

In this step, you run the drop table script to drop tables that contain data that is not required or has an unsupported conversion.

The script name for your upgrade is:

```
DLHCUPS01.DMS
```

If you want to make this step automated, follow the steps below.

To make this step automated:

1. Select the step Running Drop Table Script 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.

If any of these tables do not exist in your database, you will encounter errors. You can ignore the errors and continue with the upgrade.

Properties

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

Task 3-1-2: Exporting Project Definitions

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

```
DLUPX08E.DMS
```

Properties

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

Task 3-1-3: Importing Project Definitions

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

```
DLUPX08I.DMS
```

Properties

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

Task 3-2: Renaming Tables

This section discusses:

- Understanding Renamed Tables

- Running the RNHCUPK02MSS Script
- Running the RNHCUPK02DB2 Script
- Running the RNHCUPK02DBX Script
- Running the RNHCUPK02IFX Script
- Running the RNHCUPK02ORA Script
- Running the RNHCUPK02SYB Script
- Running the RNCSCRJ04DB2 Script
- Running the RNCSCRJ04DBX Script
- Running the RNCSUPR04MSS Script
- Running the RNCSUPR04DB2 Script
- Running the RNCSUPR04DBX Script
- Running the RNCSUPR04IFX Script
- Running the RNCSUPR04ORA Script
- Running the RNCSUPR04SYB 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 that you do not have or it cannot rename the table because there are more related objects that need to be dropped. 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 RNHCUPK02MSS Script

The RNHCUPK02MSS.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 RNHCUPK02DB2 Script

The RNHCUPK02DB2.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 3-2-3: Running the RNHCUPK02DBX Script

The RNHCUPK02DBX.SQL script renames tables on the Copy of Production database. This script is for DB2 UDB 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 3-2-4: Running the RNHCUPK02IFX Script

The RNHCUPK02IFX.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 3-2-5: Running the RNHCUPK02ORA Script

The RNHCUPK02ORA.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 3-2-6: Running the RNHCUPK02SYB Script

The RNHCUPK02SYB.SQL script renames tables on the Copy of Production database. This script is for Sybase databases and runs in the the initial and Move to Production passes.

Properties

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

Task 3-2-7: Running the RNCSCRJ04DB2 Script

The RNCSCRJ04DB2.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	Student Administration	DB2 z/OS	All

Task 3-2-8: Running the RNCSCRJ04DBX Script

The RNCSCRJ04DBX.SQL script renames tables on the Copy of Production database. This script is for DB2 UDB databases and runs in the initial and Move to Production passes.

Properties

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

Task 3-2-9: Running the RNCSUPR04MSS Script

The RNCSUPR04MSS.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	Student Administration	MS SQL Server	All

Task 3-2-10: Running the RNCSUPR04DB2 Script

The RNCSUPR04DB2.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	Student Administration	DB2 z/OS	All

Task 3-2-11: Running the RNCSUPR04DBX Script

The RNCSUPR04DBX.SQL script renames tables on the Copy of Production database. This script is for DB2 UDB databases and runs in the initial and Move to Production passes.

Properties

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

Task 3-2-12: Running the RNCSUPR04IFX Script

The RNCSUPR04IFX.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	Student Administration	Informix	All

Task 3-2-13: Running the RNCSUPR04ORA Script

The RNCSUPR04ORA.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	Student Administration	Oracle	All

Task 3-2-14: Running the RNCSUPR04SYB Script

The RNCSUPR04SYB.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	Student Administration	Sybase	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 PSMMSGNODEDEFN 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.

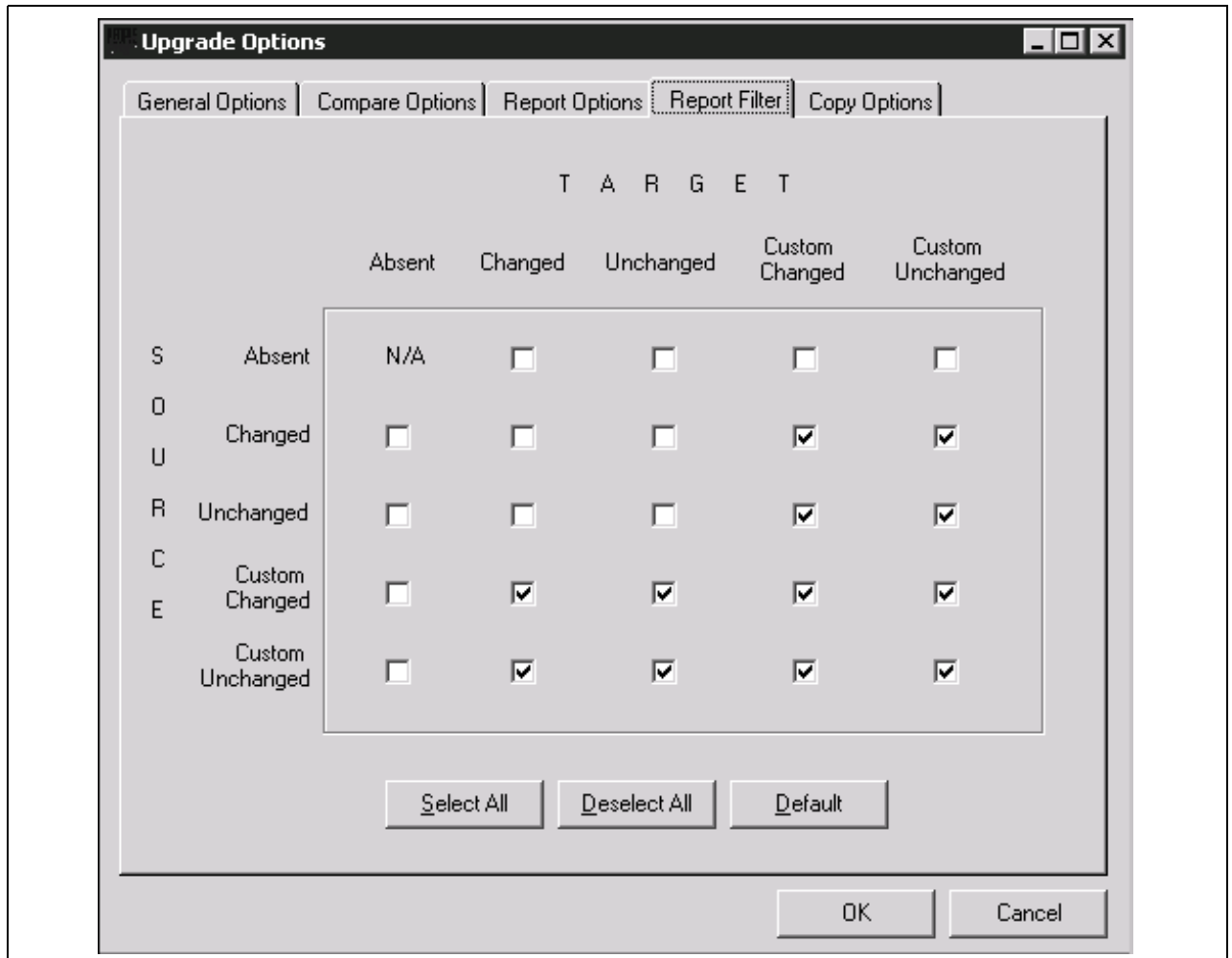
The Compare and Report dialog box appears.

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
- Loading Data to Complete System Setup
- Loading Stored Statements
- Running Final Update Statistics
- Completing Application Processes
- 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 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 PeopleTools table definitions with your database again.

In the new release, certain tables have moved from 4K to 32K page size tablespaces. Make sure these tables are created or altered in the 32K tablespaces. See the reference below for a complete list of tables.

See Appendix, “Reviewing Tablespaces.”

Task 4-3-1: Set Index Parameters After Copy

This step updates index overrides stored in the PSIDXDDLPRM 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 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 PSRECDDLPRM 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:

```
HCDDL.SQL (HCDDL.U.SQL for DB2 z/OS Unicode)
```

Important! For DB2 UNIX/NT sites, the script name is HCDDL.DMS.SQL for ANSI, and HCDDL.DMSU.SQL for Unicode.

DB2 z/OS sites must also consider how database names are assigned. After the upgrade/copy is completed, some of the 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 PeopleTools:

- Update 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 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 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
- Building Renamed Tables Script
- Running the Renamed Tables Script
- 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 Indexes for Data Conversion
- 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: Building Renamed Tables Script

In this step, you will create the SQL script to alter the tables that were renamed with Data Mover rename scripts in an earlier task. Data Mover only renamed the records in Application Designer. This step will build the SQL to perform the corresponding rename at the database level.

The generated script name is:

UPGRNHC89.SQL

Properties

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

Task 4-5-5: Running the Renamed Tables Script

In this step, you will run the script to alter the tables that were renamed in the Data Mover rename scripts in an earlier task.

The script name for your upgrade path is:

UPGRNHC89.SQL

When the Change Assistant runs the Create Indexes script to create indexes, it will not stop when it encounters errors. You may view the log file, and will see 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.” The log for your upgrade path is:

UPGRNHC89.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 4-5-6: 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 4-5-7: 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 4-5-8: 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 4-5-9: 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 4-5-10: 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.

PeopleSoft has provided a list of these new tables with information about how to size them relative to the size of your existing data. This information is meant to give you a rough estimate on an initial size, so you can execute the conversion programs without errors.

See Appendix: “Sizing Tables for the Upgrade.”

Properties

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

Task 4-5-11: 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 4-5-12: 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 4-5-13: 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 4-5-14: 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 4-5-15: 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 4-5-16: 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 4-5-17: Creating Indexes for Data Conversion

During this step, you will create indexes to improve performance during data conversion. These indexes are only used for the purposes of data conversion. They are not required for regular operation of the products, therefore they were not created in previous steps nor are they delivered with the record definitions on the Demo database. In this step you are asked to manually create those indexes that apply to you (not using Application Designer).

It is important to follow the following naming convention so the Alter with Deletes script you run in the task “Finalizing Database Structure” will drop these indexes automatically. Use PS[X]Record Name where X is any letter A-Z. For example, if you have to create an index for table PS_COUNTRY_TBL a proper index name would be PSUCOUNTRY_TBL. If an additional index is required for that same table, you can then name it (for example) PSYCOUNTRY_TBL. However, it is important to ensure that the new name of the index you are creating is not defined in the database already.

Not all listed indexes are required for all customers. Reading the comments with each listed index will help you determine if the index is applicable to your specific upgrade. Work with your database administrator to create a script that will build the indexes in your Copy of Production. You can then modify the Change Assistant Template to automate this step (for the initial pass and all future passes too). To do that, go to the Upgrade Template view, then right-click on the step and edit the step properties. Add your script name, without the file extension, in the Script/Procedure field and change the Type to SQL Script.

After reading the comments to determine whether the index is applicable to your situation, create or modify the following indexes in your Copy of Production database:

Table	With Columns	Comments
PS_UPG_GRNOPR_TMP	STATE_GARN_LAW GARN_RULE_ID EFFDT GARN_STEP	This index should be non-unique. It will improve the performance of UPG_PY89.HCPYT05 for North American Payroll customers.
PS_UPG_GRNRL_TMP	STATE_GARN_LAW GARN_RULE_ID EFFDT	This index should be non-unique. It will improve the performance of UPG_PY89.HCPYT05 for North American Payroll customers.
PS_UPG_GRNXMP_TMP	STATE_GARN_LAW GARN_RULE_ID EFFDT GARN_EX_CALC	This index should be non-unique. It will improve the performance of UPG_PY89.HCPYT05 for North American Payroll customers.

Properties

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

Task 4-5-18: Setting Index Parameters

This step updates index overrides stored in the PSIDXDDLARM 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 4-5-19: 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 4-5-20: 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 4-5-21: Setting Record Parameters

This step updates table overrides stored in the PSRECDDLPRM 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 4-5-22: 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 4-5-23: 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 4-5-24: 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 4-5-25: 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 4-5-26: 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 Application Conversion Data
- Importing Application Conversion Data
- 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:

DLHCLASWAP.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:

MVHC89EXP.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:

MVHC89IMP.DMS

See “Prepare Your Database.”

Properties

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

Task 4-6-14: Exporting Application Conversion Data

In this step, you will export data, from the Demo database, required for data conversion. The script name for your upgrade path is as follows:

DLHCUPT01E.DMS

Properties

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

Task 4-6-15: Importing Application Conversion Data

In this step, you will import data into your Copy of Production database for use during data conversion. The script name for your upgrade path is as follows:

```
DLHCUPT01I.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.

See Oracle/PeopleSoft Customer Connection (Implement, Optimize + Upgrade, Upgrade Guide, Upgrade Documentation and Software, Upgrade Documentation and Scripts, Release, HRMS, PeopleSoft 9.0, <upgrade path>, Upgrade Scripts and Templates).

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 7
- Running Data Conversion for Group 8
- Running Data Conversion for Group 9
- Running Data Conversion for Group 10
- Running Data Conversion for Group 11

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.

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.

In the appendix, “Sizing Tables for the Upgrade,” Oracle has provided the approximate number of rows that will be loaded into some tables.

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.”

See Appendix: “Sizing Tables for the Upgrade.”

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.

See Appendix: “Sizing Tables for the Upgrade.”

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.

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 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 4-11-7: 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 4-11-8: Running Data Conversion for Group 9

This step runs the UPG_DATACONV Application Engine program for Group 9. If you want to see additional documentation for Group 9, 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 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 4-11-10: Running Data Conversion for Group 11

This step runs the UPG_DATACONV Application Engine program for Group 11. If you want to see additional documentation for Group 11, 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: Loading Data to Complete System Setup

This section discusses:

- Exporting Strings
- Importing Strings
- Exporting EDI Statements
- Importing EDI Statements
- Exporting Mass Change Data
- Importing Mass Change Data

- Exporting XML Service Information
- Importing XML Service Information
- Exporting Related Language System Data
- Importing Related Language System Data
- Editing the System Data Scripts
- Exporting Application System Data
- Importing Application System Data
- Exporting Data for Your Upgrade Path
- Importing Data for Your Upgrade Path
- Exporting Common Portal System Options
- Importing Common Portal System Options
- Exporting Setup Data
- Importing Setup Data
- Exporting Generic Notifications
- Importing Generic Notifications
- Exporting Global Payroll Switzerland Tax Rates
- Importing Global Payroll Switzerland Tax Rates

Task 4-14-1: 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 4-14-2: 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 4-14-3: Exporting EDI Statements

This script exports EDI Statements from the Demo database. The script name for your upgrade path is:

`DLUPX05E.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 4-14-4: Importing EDI Statements

This script imports the EDI Statements into the Copy of Production database. The script name for your upgrade path is:

`DLUPX05I.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 4-14-5: Exporting Mass Change Data

This script exports Mass Change tables from the Demo database. The script name for your upgrade path is:

`DLUPX06E.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 4-14-6: Importing Mass Change Data

This script imports Mass Change tables into the Copy of Production database. The script name for your upgrade path is:

`DLUPX06I.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 4-14-7: 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 4-14-8: 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 4-14-9: 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:

`DLHCLASYSE.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 4-14-10: 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:

DLHCLASYSI.DMS

Properties

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

Task 4-14-11: Editing the System Data Scripts

Oracle sites will need to edit the system data scripts for date formats. Change the date format *YYYY-MM-DD* to *DD-MMM-YYYY*. For example, a date 1900-01-01 would need to be changed to 01-JAN-1900. The scripts you will need to edit are as follows:

DLHCSYSE.DMS
DLHCSYSI.DMS

Properties

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

Task 4-14-12: 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:

DLHCSYSE.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 4-14-13: 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:

```
DLHCSYSI.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 4-14-14: Exporting Data for Your Upgrade Path

This script exports system data from application tables from the Demo database into a Data Mover *.DAT file that is needed for upgrading from your current release. In a later step, this data will be loaded into the Copy of Production database. The script name for your upgrade path is:

```
DLHCUPK05E.DMS
```

Properties

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

Task 4-14-15: Importing Data for Your Upgrade Path

This script imports the application system data that is needed for upgrading from your current release, which was exported in the above step, into the Copy of Production database. The script name for your upgrade path is:

```
DLHCUPK05I.DMS
```

Properties

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

Task 4-14-16: 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 4-14-17: 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 4-14-18: 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 4-14-19: 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 4-14-20: Exporting Generic Notifications

This step exports Generic Notification Templates data from the Demo database. The script name for your upgrade path is:

DLHCUPT04E.DMS

Properties

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

Task 4-14-21: Importing Generic Notifications

This step imports Generic Notification Templates data into your Copy of Production database.

The script name for your upgrade path is:

DLHCUPT04I.DMS

Properties

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

Task 4-14-22: Exporting Global Payroll Switzerland Tax Rates

In this step, you export the GPCH_TX_RATES table from the Demo database. The script name for your upgrade path is:

DLHCGCHS10E.DMS

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Both	Global Payroll Switzerland	All	All

Task 4-14-23: Importing Global Payroll Switzerland Tax Rates

In this step, you import the GPCH_TX_RATES table into your Copy of Production database. The script name for your upgrade path is:

```
DLHCGCHS10I.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll Switzerland	All	All

Task 4-15: Loading Stored Statements

This section discusses:

- Understanding Loading Stored Statements
- Setting PSOPTIONS for COBOL
- Running the STOREFA Script
- Running the STORECC Script
- Running the STOREAD Script
- Running the STOREAV Script
- Running the STORESF Script
- Running the STORESR Script
- Running the STOREBAS Script
- Running the STOREGP Script
- Running the STOREHRM Script
- Running the STOREPAY Script
- Running the STOREPEN Script
- Running the STOREPYI Script

Understanding Loading Stored Statements

This task loads all the new COBOL stored statements in your database. The STORE*.DMS scripts are located in the PS_HOME\SRC\CBL\BASE directory. These scripts are only delivered if you have licensed the product and should only appear in the Change Assistant job based on the product configuration in the environment definition.

The stored statements scripts are executed only in the initial pass. In the move to production passes, a different script will export the stored statement table, PS_SQLSTMT_TBL, from the first copy of production and import it into the second copy of production.

Task 4-15-1: Setting PSOPTIONS for COBOL

This step runs DB2ALLCCSIDUPD.SQL and updates PSOPTIONS.DB2ALLCCSIDOK. The purpose of the field PSOPTIONS.DB2ALLCCSIDOK is to control whether COBOL processing should be allowed for COBOL processes running under Windows NT/2000 or UNIX against a DB2 z/OS database where the DB2 subsystem zparm for SCCSID is not 37 (US English EBCDIC). A value of 'N' in this field will result in the COBOL process being terminated and value of 'Y' will allow the process to continue.

Note. Move to Production: PSOPTIONS is copied in the Move to Production pass with the MVPRDEXP/IMP scripts.

Properties

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

Task 4-15-2: Running the STOREFA Script

STOREFA.DMS loads stored statements for COBOL programs owned by the Financial Aid Product.

Properties

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

Task 4-15-3: Running the STORECC Script

STORECC.DMS loads stored statements for COBOL programs owned by the Campus Community product.

Properties

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

Task 4-15-4: Running the STOREAD Script

STOREAD.DMS loads stored statements for COBOL Programs owned by the Recruiting and Admissions product.

Properties

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

Task 4-15-5: Running the STOREAV Script

STOREAV.DMS loads stored statements for COBOL programs owned by the Contributor Relations product.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Student Administration Contributor Relations	All	All

Task 4-15-6: Running the STORESF Script

STORESF.DMS loads stored statements for COBOL programs owned by the Student Financials product.

Properties

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

Task 4-15-7: Running the STORESR Script

STORESR.DMS loads stored statements for COBOL programs owned by the Student Records and Academic Advisement products.

Properties

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

Task 4-15-8: Running the STOREBAS Script

In this step, you run STOREBAS.DMS. This script loads stored statements for COBOL programs owned by the Benefits Administration product.

Properties

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

Task 4-15-9: Running the STOREGP Script

In this step, you run STOREGP.DMS. This script loads stored statements for COBOL programs owned by the Global Payroll product.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Global Payroll Core	All	All

Task 4-15-10: Running the STOREHRM Script

In this step you run STOREHRM.DMS. This script loads stored statements for COBOL programs.

Properties

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

Task 4-15-11: Running the STOREPAY Script

In this step, you run STOREPAY.DMS. This script loads stored statements for COBOL programs owned by the Payroll for North America product.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Payroll for North America	All	All

Task 4-15-12: Running the STOREPEN Script

In this step, you run STOREPEN.DMS. This script loads stored statements for COBOL programs owned by the Pension Administration product.

Properties

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

Task 4-15-13: Running the STOREPYI Script

In this step, you run STOREPYI.DMS. This script loads stored statements for COBOL programs owned by the Payroll Interface product.

Properties

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

Task 4-16: Running Final Update Statistics

This section discusses:

- Generating Final RUNSTATS for DB2 UNIX
- Running Final Statistics for DB2 UNIX
- Running Final Statistics for DB2 zOS
- Running Final Statistics for Informix
- Running Final Statistics for Oracle

Task 4-16-1: Generating Final RUNSTATS for DB2 UNIX

This step executes the RUNSTATS.SQR that creates the RUNSTATS.SQL to update statistics on DB2 UNIX/NT.

Properties

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

Task 4-16-2: Running Final Statistics for DB2 UNIX

Earlier in the upgrade process you updated your statistics. Now that you have converted all of your data and modified all indexes, update your statistics again to improve performance of your post upgrade processes and testing. Run the RUNSTATS.SQL script created in the previous step.

Properties

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

Task 4-16-3: Running Final Statistics for DB2 zOS

Earlier in the upgrade process you updated your statistics. Now that you have converted all of your data and modified all indexes, update your statistics again to improve performance of your post upgrade processes and testing. 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 4-16-4: Running Final Statistics for Informix

Earlier in the upgrade process you updated your statistics. Now that you have converted all of your data and modified all indexes, update your statistics again to improve performance of your post upgrade processes and testing. This step runs UPDATESTATS to update the statistics on your database.

Properties

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

Task 4-16-5: Running Final Statistics for Oracle

Earlier in the upgrade process you upgraded your statistics. Now that you have converted all of your data and modified all indexes, update your statistics again to improve performance of your post upgrade processes. Contact your database administrator to have the statistics updated on your database before proceeding with your upgrade and testing.

Properties

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

Task 4-17: Completing Application Processes

This section discusses:

- Refreshing Personal Data Table
- Running Data Conversion for Group 20
- Exporting Setup Data for Rules
- Importing Setup Data for Rules
- Exporting Payroll Interface Tables
- Importing Payroll Interface Tables
- Exporting US Custom Garnishment Rules
- Importing US Custom Garnishment Rules

Task 4-17-1: Refreshing Personal Data Table

In this step, you refresh the Personal Data snapshot table used for reporting. Run the Application Engine program PERS_REFRESH to refresh the table.

Properties

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

Task 4-17-2: Running Data Conversion for Group 20

This step runs the UPG_DATACONV Application Engine program 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 4-17-3: Exporting Setup Data for Rules

Run this step only during Move to Production passes. It exports data from tables that were updated for Template Built and Custom Rules setup during the initial pass.

Run the following script:

```
MVTLW01E.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	MTP	Time and Labor	All	All

Task 4-17-4: Importing Setup Data for Rules

Run this step only during Move to Production passes. It will import data from tables that were updated for Template Built and Custom Rules setup during the initial pass.

Run the following script:

```
MVTLW01I.DMS
```

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	Time and Labor	All	All

Task 4-17-5: Exporting Payroll Interface Tables

This step is only run during the Move to Production passes. It exports all Payroll Interface definitions including data from tables that were updated in the chapter “Complete Database Changes,” Updating Payroll Interface Definitions task during the initial pass.

The script name for your path is:

```
MVHCPIT01E.DMS
```


Properties

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

Task 4-17-6: Importing Payroll Interface Tables

This step is only run during the Move to Production passes. It imports all Payroll Interface definitions including data from tables that were updated in the chapter “Complete Database Changes,” Updating Payroll Interface Definitions task during the initial pass.

The script name for your path is:

```
MVHCPIT01I.DMS
```

Properties

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

Task 4-17-7: Exporting US Custom Garnishment Rules

This step is only run during the Move to Production passes. If you have created any U.S. garnishment rules, this script will export those rules from garnishment rules tables.

Note. If you have not created any U.S. garnishment rules, you do not have to run this task.

The script name for your path is:

```
MVHCPYT05E.DMS
```

See Appendix: “Understanding Garnishments Changes.”

See “Complete Database Changes,” Setting Up US Custom Garnishment Rules.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	MTP	Payroll for North America	All	All

Task 4-17-8: Importing US Custom Garnishment Rules

This step is only run during the Move to Production passes. If you have created any U.S. garnishment rules and run the export script, this script will import those rules into garnishment rules tables.

Note. If you have not created any U.S. garnishment rules, you do not have to run this task.

The script name for your path is:

MVHCPYT05I.DMS

See Appendix: “Understanding Garnishments Changes.”

See “Complete Database Changes,” Setting Up US Custom Garnishment Rules.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	Payroll for North America	All	All

Task 4-18: 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 PeopleTools related language tables.

Note. For DB2 z/OS customers, PeopleSoft recommends that you run RUNSTATS against the system catalog tables at this time.

Task 4-18-1: Run the TSRECPOP Script

In this step, the TSRECPOP script initializes and modifies the data in PeopleTools related language architecture tables.

Properties

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

Task 4-19: 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 4-20: 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 4-21: 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 4-21-1: Run the Final DDDAUDIT Report

DDDAUDIT is an SQR that compares your production SQL data tables with the 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 4-21-2: 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 4-21-3: 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 4-21-4: Run the Final Alter Audit

Run the PeopleTools alter record process on all tables in your system to check whether the PeopleTools definitions are synchronized with the underlying SQL data tables in your database. PeopleSoft calls this process an Alter Audit. Alter Audit compares the data structures of your database tables with the PeopleTools definitions to uncover inconsistencies. Alter Audit then creates an SQL script with the DDL changes needed to synchronize your database with the 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 4-21-5: Review the Final Audits

The Alter Audit process creates SQL scripts that correct any discrepancies between your 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. PeopleSoft 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 PeopleSoft deletes a Permission List, 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 4-21-6: 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 4-21-7: 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
- Updating Department Security
- Backing Up Before Manual Changes
- Converting Retirees with Pay
- Upgrading Global Payroll Country Extensions
- Updating Payroll Interface Definitions
- Verifying Record and RecordField References
- Updating Jobs and Process for GP Packager
- Upgrading Rules
- Validating EE Garn Payee Data
- Setting Up US Custom Garnishment Rules
- Validating EE Garn Rule Data
- Reapplying Absence Management Direct Reports UI
- Updating the Employee ID Length
- Setting Up Student Group Security
- Reviewing PeopleTools Functionality
- Preparing the Content Provider Registry
- Updating the Portal Options Data
- 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 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.

At this time, you need to review the two security views that are used for Global Security and Row Level Security. The following naming conventions have been adopted in the new PeopleSoft HRMS release:

List Type	Format
Data Permission	HCDPXXXXXX (Where XXXXXX can be any specification you choose.)
Component Permission Lists	HCCPXXXXXX (Where XX is the product code and YYYY is any specification you choose.)
Primary Permission Lists	HCPPXXXXXX (where XXXXXX is any specification you choose.)

If you decide to change your security to use this naming convention, you do not need to take any further action. However, if you do not intend to use the naming convention given above, then you need to modify the WHERE clause in the following two views to reference the naming convention you have decided to follow.

Security View	Function
OPRDEFN_SCRTY3	Data Permissions (Row Level Security)
OPRDEFN_SCRTY4	Primary Permissions (Global Security)

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 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 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 in order 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. In order 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 =>
oprld -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: Updating Department Security

This section discusses:

- Understanding Department Security
- Refreshing Operator Security
- Refreshing Transaction Records

Understanding Department Security

In this task you update the Operator Security Join table and the transaction side Security Join Tables so that they are based on the most current information. You need to run this step whether you use department level security or not.

Task 5-5-1: Refreshing Operator Security

This process refreshes the Operator Security Join Table. You must run this process whenever a Security Type is modified, when a Security Tree is modified or added, or when a ROWSECCLASS is modified or added.

To refresh the Operator Security Join Table:

1. From your browser, sign on to your Copy of Production database, keeping the default browser address.
2. Select Set Up HRMS, Security, Core Row Level Security, Refresh SJT_CLASS_ALL.
3. Click Add a New Value.
4. Enter *UPGR_OPRSECURITY* on the Run Control selection panel and click Add.
5. On the Run Control page, keep all preset defaults for upgrading and click Run.
6. On the Process Scheduler Request page, click OK.
7. Monitor the process from the Process Monitor.
8. Select Set Up HRMS, Security, Core Row Level Security, Refresh SJT_OPR_CLS.
9. Enter *UPGR_OPRSECURITY* on the Run Control selection panel and click Search.
10. On the Run Control page, keep all preset defaults for upgrading and click Run.
11. On the Process Scheduler Request page, click OK.
12. Monitor the process from the Process Monitor

See *PeopleSoft Enterprise HRMS 9.0 Application Fundamentals*, “Setting Up and Administering HRMS Security.”

Properties

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

Task 5-5-2: Refreshing Transaction Records

This process updates the transaction side Security Join Tables.

To refresh the transaction side Security Join Tables:

1. From your browser, sign on to your Copy of Production database, keeping the default browser address.
2. Select Set Up HRMS, Security, Core Row Level Security, Refresh Trans SJT Tables.
3. Click Add a New Value.
4. Enter *UPGR_OPRSECURITY* on the Run Control selection panel and click Add.
5. On the Run Control page, keep all preset defaults for upgrading and click Run.
6. On the Process Scheduler Request page, click OK.
7. Monitor the process from the Process Monitor.

See *PeopleSoft Enterprise HRMS 9.0 Application Fundamentals*, “Setting Up and Administering HRMS Security.”

Properties

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

Task 5-6: Backing Up Before Manual Changes

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

Task 5-7: Converting Retirees with Pay

This section discusses:

- Understanding the Conversion for Retirees with Pay
- Running Retiree Additional Pay Report UVPYT05
- Running Retiree Additional Pay Report UVPYT06
- Running Retiree Additional Pay Report UVPYT07
- Running Upgrade Conversion for Retirees with Pay
- Rebuilding Job Flags

Understanding the Conversion for Retirees with Pay

In this task, you migrate retirees receiving a pension outside of Pension Administration from employees to persons of interest, in order to follow the new Person Model design.

In releases prior to PeopleSoft 8.9, retirees that were paid through the system but outside of Pension Administration appeared as employees. With the Person Model changes delivered in PeopleSoft 8.9 and beyond, these retirees become Persons of Interest (POI). Because there is no way to predict every scenario used to process the pension for the retiree, we must deliver this conversion outside of the standard upgrade data conversion. If your data fits the scenario outlined in the list below, then you should complete this step.

Note. If your data does not fit the scenario outlined below, please consult the Global Support Center (GSC) to obtain a solution specific to your business requirements.

- This conversion assumes that these retirees belong to a company with a Tax Report Type of *R* for 1099R.

- This conversion assumes that your Payroll System is Payroll for North America
- This conversion assumes that you are *not* using Benefits Billing.
- This conversion assumes that you are *not* using Benefits Administration Credits.
- If the EMPL_RCD value for the employment instance is the same value for the retirement instance, the conversion sets the EMPL_RCD value to the next value available for the person on the POI instance.

This includes changing the value on the payroll tables.

- If the retiree transfers to the 1099R company, the conversion changes the transfer (XFR) ACTION to Retired with Pay (RWP).

The conversion then copies the data from the row to insert the POI instance.

- If the retiree terminates from the actual company and hires into the 1099R company, the conversion changes the termination (TER) ACTION to Retired with Pay (RWP).

The conversion also changes the hire (HIR) ACTION into the 1099R company to Add Person of Interest (POI).

- This conversion sets the Benefit System for the retiree to the value specified on the Upgrade Retiree Run Control page.
- This conversion will insert or update the following tables:

- Human Resources

```
PER_ORG_ASGN - Insert for Retirees, Update for Survivor Beneficiaries & Joint⇒
Annuitants.
PER_ORG_INST -Insert
JOB - Update and Insert if retiree transfers to 1099R Company
JOB_JR - Update and Insert if retiree transfers to 1099R Company
JOB_EARNS_DIST - Update
COMPENSATION - Update
```

- Federal

```
GVT_JOB - Update & Insert if Retiree transfers to 1099R Company
GVT_EE_KEY - Insert
GVT_PERS_DATA - Update & Insert if Retiree transfers to 1099R Company
GVT_PERS_PHONE - Update
GVT_PERS_NID - Update
GVT_EMPLOYMENT - Update
GVT_CITIZENSHIP - Update
GVT_DISABILITY - Update
GVT_JOBDIST - Update
GVT_AWD_DATA - Update
GVT_EE_DATA_TRK - Update
JOB_USF - Update
GVT_PAYROLL_DATA - Update
GVT_PAY_LIMITS - Update
```

- Payroll

TAX_DIST_EFFDT - if row exists Update else Insert.
 TAX_DISTRIB - if row exists Update else Insert
 ADDL_PAY_DATA - See Below
 ADDL_PAY_EFFDT - See Below
 ADDL_PAY_ERNCN - See Below
 BAL_ADJ_CN_ERN - Update
 BAL_ADJ_ERN - Update
 CAN_ERN_BALANCE - Update
 DED_LINE - Update
 EARNINGS_BAL - Update
 EMPL_WAGELS_CAN - Update
 PAY_CHECK - Update
 PAY_EARNINGS - Update
 PAY_LINE - Update
 PSHUP_TXN - Update
 PAY_SPCL_EARNS - Update.

- For the scenarios outlined below, the conversion will convert the ADDL_PAY_ERNCN, ADDL_PAY_EFFDT, and ADDL_PAY_DATA tables in the manner described.

- The maximum EFFDT with End Date is before the retirement date.

All rows are applicable to the employee's history. No action is taken

- The maximum EFFDT with End Date is after the retirement date.

Some rows are applicable to the employee's history, while some are applicable to the retirement history. This data is too cumbersome to convert, therefore we recommend that you convert this data manually. We provide an SQR Report, UVPYT05.SQR, to identify these rows.

- The maximum EFFDT is before the retirement date.

This history is applicable to both employment and retirement periods. Therefore, the conversion process will insert a row for the retirement data. We also provide an SQR Report, UVPYT06.SQR to identify these rows.

- The maximum EFFDT is after the retirement date.

This history is applicable to both employment and retirement periods. Therefore, the conversion process will insert a row for the retirement data. We also provide an SQR Report, UVPYT07.SQR to identify these rows.

- The minimum EFFDT is after the retirement date.

This data is only applicable to the retiree's history. Therefore, the conversion process will update these rows, setting the EMPL_RCD value to the value of the POI instance.

- This conversion does *not* modify the following tables:

Payroll

AP_EXTRACT_LINE - if you use AP to create vouchers the data here will not be⇒
 consistent since we cannot update the data. However, you will be able to view⇒
 the information by navigating to: Payroll for North America > Pay Distribution⇒
 > Accounts Payable Information > Review AP Extract Lines

WRK_CHECK - you must complete Payroll processing before upgrading.
 WRK_EARNINGS - <same as above>
 WRK_LINE - <same as above>
 WEK_PSHUP_TXN - <same as above>
 WRK_SPCL_EARNS - <same as above>
 PYRE_DETAIL - <same as above>
 PYRE_INVALID <same as above>
 TL_EMPL_DATA - not expecting Retirees to use Time & Labor
 PY_LDTLEMP_TBL - <same as above>
 CSB_EMPL_SERIES - obsolete Canadian Savings Bond functionality
 CSB_REGISTRANT - <same as above>
 CSB_REG_DEMON - <same as above>

Task 5-7-1: Running Retiree Additional Pay Report UVPYT05

In this step, you run the Retiree Additional Pay SQR Report, UVPYT05.SQR. This report lists retirees with pay that have additional pay with an end date where the maximum EFFDT is after the retirement date.

To run the report:

1. From your web browser, sign in to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Reports, 1099R AddlPay after Ret w/ End.
3. Select Add a New Value
4. Enter *UPG_RET* for the Run Control ID.
5. Click Add.
6. On the Add'l Pay after Ret w/ End page, click Run.
7. From the Process Scheduler Request page, click OK.
8. Analyze the report to decide what rows belong to the retirement history for the each person.

Apply manual modifications after running the conversion by setting the retirement rows to the EMPL_RCD value assigned by the conversion for the POI instance.

Properties

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

Task 5-7-2: Running Retiree Additional Pay Report UVPYT06

In this step, you run the Retiree Additional Pay SQR Report, UVPYT06.SQR. This report lists retirees with pay that have additional pay *without* an end date where the maximum EFFDT is before the retirement date.

To run the report:

1. From your web browser, sign in to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Reports, 1099R AddlPay b4 Ret w/o End.

3. Enter *UPG_RET* for the Run Control ID.
4. Click Search.
5. On the Add'l Pay b4 Ret w/o End page, click Run
6. From the Process Scheduler Request page, click OK.
7. Keep this report as a reference to verify that the conversion converted the data properly.

Properties

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

Task 5-7-3: Running Retiree Additional Pay Report UVPYT07

In this step, you run the Retiree Additional Pay SQR Report, UVPYT07.SQR. This report lists retirees with pay that have additional pay *without* an end date where the maximum EFFDT is after the retirement date

To run the report:

1. From your web browser, sign in to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Reports, 1099R AddlPay after Ret w/o End.
3. Enter *UPG_RET* for the Run Control ID.
4. Click Search.
5. On the Add'l Pay after Ret w/o End page, click Run.
6. From the Process Scheduler Request page, click OK.
7. Keep this report as a reference to verify that the conversion converted the data properly.

Properties

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

Task 5-7-4: Running Upgrade Conversion for Retirees with Pay

In this step, you run the Application Engine Program to upgrade retirees with pay from employees to persons of interest.

To run the program:

1. From your web browser, sign in to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, 1099R Conversion.
3. Select Add a New Value.
4. Enter *UPG* for the Run Control ID.
5. Click Add.

- In the Benefits System field, select a value for retirees with pay.
The JOB table will be populated with this value.

Upg Ret Runcntl page

- Click the Run button.
- From the Process Scheduler Request page, click OK.
- Click the Process Monitor link to monitor the program's process.

Properties

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

Task 5-7-5: Rebuilding Job Flags

After successfully completing the conversion in the previous step, you must rebuild PRIMARY_JOBS by running the SQR utility BEN500.SQR.

To run the SQR utility:

- From your web browser, sign in to the Copy of Production database.
- Select Benefits, Maintain Primary Jobs, Rebuild Primary Job Flags.
- Select Add a New Value.
- Enter the run control *UPG_PRIMARY_JOBS* and click Run.
- Click the Process Monitor link to monitor the program's process.

Properties

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

Task 5-8: Upgrading Global Payroll Country Extensions

This section discusses:

- Understanding Global Payroll Country Extensions Upgrade
- Creating Country Extensions Rule Packages
- Applying the Licensed Rule Package
- Applying the Unlicensed Rule Package
- Creating the Final Rule Package
- Applying the Final Rule Package
- Creating the Consolidated NonRule Package
- Creating Individual NonRule Packages
- Applying the Consolidated NonRule Package
- Applying Individual NonRule Packages
- Creating the Rule Delete Package
- Applying the Rule Delete Package
- Finalizing the Rule Delete Process
- Updating Install Options on the Target Database
- Setting the Store Option for System Elements
- Exporting HR Rate Codes
- Importing HR Rate Codes

Understanding Global Payroll Country Extensions Upgrade

In this task, you upgrade or add Oracle-delivered elements and system data for each Global Payroll Country Extension using the Rule and Non-Rule Packager functionality delivered as part of Global Payroll. You will also apply additional steps for each country, when required.

Note. Perform this task only if you are upgrading PeopleSoft Global Payroll Country Extensions already installed on your Copy of Production database or newly licensing PeopleSoft Global Payroll Country Extensions. If you do not use Global Payroll or use only the Global Payroll core product, you can skip this task.

Oracle uses the convention *XXX* to indicate the three-character country code defined by ISO. To apply these instructions, you have to replace *XXX* with the relevant country code. The country codes of the 17 countries supported by Global Payroll are shown in the table below:

Country Extension	Country Codes (ISO codes)
Australia	AUS
Brazil	BRA
France	FRA

Country Extension	Country Codes (ISO codes)
Germany	DEU
Hong Kong	HKG
India	IND
Italy	ITA
Japan	JPN
Malaysia	MYS
Mexico	MEX
Netherlands	NLD
New Zealand	NZL
Singapore	SGP
Spain	ESP
Switzerland	CHE
United Kingdom	GBR
United States	USA

Task 5-8-1: Creating Country Extensions Rule Packages

This section discusses:

- Understanding Licensed and Unlicensed Country Extensions Rule Packages
- Updating Installation Options
- Creating Country Extensions Rule Package Definitions
- Creating and Exporting the Country Extensions Rule Packages

Understanding Licensed and Unlicensed Country Extensions Rule Packages

In this step, you create licensed and unlicensed country extensions rule packages on the New Release Demo database. Both of the package definitions will be generated by the Application Engine UPG_GPCECRT, based on the Install Flags for GP Countries. The licensed country extension rule package UPGRULL will contain all the Oracle-delivered rule elements for the countries that you have already installed on your Copy of Production database, and the unlicensed country extension package UPGRULU will contain all Oracle-delivered rule elements for countries that you have not installed on your Copy of Production database. (UPGRULU also includes countries you may be newly licensing now.)

Updating Installation Options

On the New Release Demo database, the installation options for all Global Payroll Country Extensions are selected by default. Therefore you will have to clear the install check boxes for the countries you have not licensed. This will enable the Application Engine UPG_GPCECRT to create two package definitions based on the country extensions that you use and the ones that you do not use.

Note. At the end of the upgrade, you will have rules elements for *all* Global Payroll Country Extensions on your database. However, we want you to clear installation options at this time so that you can save time by not running the Compare Report for unlicensed country extensions while applying the rules package on your Copy of Production database.

To update installation options:

1. From your browser, sign in to the New Release Demo database.
2. Select Set Up HRMS, Install, Installation Table.
3. Click the Installed GP Countries link.
4. Clear the check boxes corresponding to all unlicensed country extensions on your old release.

If you are licensing a new country extension, you can clear the check box for that country extension here because you will *not* have any customizations on your Production database (which have to be compared).

5. Click OK.
6. Click Save.

Note. You can ignore the message that pops up when you click Save.

Creating Country Extensions Rule Package Definitions

To create the rule package definitions:

1. Sign in to the New Release Demo database using Application Designer.
2. Open the Application Engine UPG_GPCECRT.
3. Run the Application Engine UPG_GPCECRT from Application Designer using the run control of your choice.

Note. Running the Application Engine will overwrite any existing Rule Package definitions that have the name UPGRULL or UPGRULU.

Creating and Exporting the Country Extensions Rule Packages

In this step, you create and export the licensed and unlicensed country extensions rule packages. You will have to run through this step twice—once for Package ID UPGRULL and then again for Package ID UPGRULU.

Note. UPGRULL will not be generated if you are only licensing a new country extension and were not using any Global Payroll Country Extension previously. UPGRULU will not be generated if you have licensed all 17 country extensions. However, in most cases you will have both of the packages. Run this step for each generated package.

Note. Before proceeding with this step, ensure that the Process Scheduler is up and running.

To create and export the package:

1. From your browser, sign in to the New Release Demo database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Create/Export Rule Package.
3. On the Find an Existing Value tab, search for the Package ID (UPGRULL or UPGRULU) and open the package definition.
4. Select the Package Processing tab.
5. Select the Create Package, Create Scripts, and Export Package check boxes.
6. For the script location, enter the *PS_HOME/SCRIPTS* directory of the New Release Demo database.
7. Click Process.

8. On the Process Monitor page, wait for the process to run successfully.

Verify that the program completed without errors by reviewing the message log. If you encounter any issues or need more information, refer to PeopleBooks.

See *PeopleSoft Enterprise 9.0 Global Payroll PeopleBook*, “Using the Utilities.”

9. Store the generated script and data files. There will be 3 scripts and 1 data file generated in the *PS_HOME/SCRIPTS* and *PS_HOME/DATA* directories respectively.

They will be named as shown below. (Replace *PACKAGE_ID* with UPGRULL or UPGRULU, as applicable.)

```
PACKAGE_ID_EXP.DMS
PACKAGE_ID_IMP.DMS
GP_CLEANUP.DMS
PACKAGE_ID_DAT.DAT
```

Note. Store the generated script and data files until the final upgrade pass is complete. They may be needed in the future.

10. If both rule packages UPGRULL and UPGRULU were generated, repeat the steps above for the second package.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	Global Payroll All Countries	All	All

Task 5-8-2: Applying the Licensed Rule Package

This section discusses:

- Importing and Comparing the Licensed Country Extensions Rule Package
- Upgrading the Licensed Country Extension Rule Package

Note. You can skip this step if you are only licensing new country extensions and do not have any country extensions installed on your Copy of Production (Target) database, because you will not have a UPGRULL package.

Note. Before proceeding with this step, ensure that the Process Scheduler is up and running. Remember to select the Compare Report option while applying UPGRULL.

Importing and Comparing the Licensed Country Extensions Rule Package

The licensed country extensions rule package has to be applied on the Copy of Production (Target) database during the Initial pass.

To import and compare the package:

1. Place the script files of the rule package UPGRULL in the *PS_HOME/SCRIPTS* directory of the Copy of Production (Target) database.

The script files are:

```
UPGRULL_IMP.DMS
GP_CLEANUP.DMS
```

2. Place the data file UPGRULL_DAT.DAT in the *PS_HOME/DATA* directory of your Copy of Production (Target) database.
3. From your browser, sign in to the Copy of Production (Target) database.
4. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Apply Rule Package.
5. Add a new Package ID *UPGRULL*.
6. Select the Package Processing tab and complete the following steps:
 - a. Select the Import Packages check box.
 - b. For the script location, enter the *PS_HOME/SCRIPTS* directory.
 - c. Select the Compare Package check box.
 - d. Select the Create Compare Report check box.
 - e. Under Compare Processing, select the Update Statistics check box.
 - f. Under Compare Report Print Options, select the Errors/Warnings, Modified, and New check boxes.
 - g. Under Compare Processing, select the Update Statistics check box.
 - h. Click Process.
7. On the Process Monitor page, verify that the process runs to success.
8. Review the Rule Package Compare Report PDF file that was generated for detailed information about which elements are in an error or warning status, and whether an element is being added or modified.

This is a field-by-field compare report.

See *PeopleSoft Enterprise 9.0 Global Payroll PeopleBook*, “Using the Utilities.”

9. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Apply Rule Package.

10. On the Find an Existing Value tab, search for the Package ID UPGRULL and open the package.
11. All elements with a warning or error message will be sorted to the top of the list.

You have to fix all the errors and review all the warnings. You can ignore any elements with *Action = Info Only* and the Upgrade check box cleared and unavailable for selection, as these elements are informational only and will not be upgraded.

The compare process clears the Upgrade option for any elements contained in the PeopleSoft Rule Package with *Action = Upgrade* for which you have taken ownership and you have modified. Therefore you should do the following:

- a. Document the modifications you made to the original element.
- b. Select the Upgrade option to apply the current PeopleSoft-software settings of the element.

Note. You can ignore any PS Delivered/PS Modified warning messages.

You will reapply the modifications later in the upgrade. These updates are included in the Rule Package you apply during the Move to Production phase.

Note. There are some changes that you can make to Oracle-delivered elements that do not force you to take ownership of the element (as a result, the Upgrade option might still be selected for these elements). Oracle suggests that during this step you review all of the modifications you made to Oracle-delivered elements to determine whether you want to take the updated Oracle-delivered element definitions or retain your element modifications. Review the Upgrade Flags on the Rule Package and set them accordingly.

Upgrading the Licensed Country Extension Rule Package

To upgrade the package:

1. From your browser, sign in to the Copy of Production (Target) database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Apply Rule Package.
3. On the Find an Existing Value tab, search for Package ID UPGRULL and open the package.
4. Select the Package Processing tab.
 - a. Select the Upgrade Package check box.
 - b. Under Upgrade Processing, select the Update Statistics check box.
 - c. Under Continue Upgrade Processing, leave the With Errors and With Warnings check boxes cleared.
 - d. Click Process.
5. On the Process Monitor page, verify that the process runs to success.
6. Click the “Go back to Apply Rule Package” link.
7. On the Find an Existing Value tab, search for the Package ID UPGRULL and open the package.
8. Select the Package Elements tab.
9. Make sure that the first element displays *Success* in the Results column.

Then scroll down until you see the first element that has the Upgrade check box selected and make sure that the Upgrade Status is *Done*.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Global Payroll All Countries	All	All

Task 5-8-3: Applying the Unlicensed Rule Package

The unlicensed country extensions rule package has to be applied on the Copy of Production (Target) database during the Initial Pass.

Note. You can skip this step if you have already licensed all seventeen Global Payroll Country Extensions in the old release, which means that you do not have any unlicensed country extension to upgrade.

Note. Before proceeding with this step, ensure that the Process Scheduler is up and running. You do not have to run the Compare Report while applying UPGRULU.

To apply the package:

1. Place all the script files of the rule package in the *PS_HOME/SCRIPTS* directory of the Copy of Production (Target) database. The script files are:

```
UPGRULU_IMP.DMS
GP_CLEANUP.DMS
```

2. Place the data file *UPGRULU_DAT.DAT* of the rule package in the *PS_HOME/DATA* directory of the Copy of Production (Target) database.
3. From your browser, sign in to the Copy of Production (Target) database.
4. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Apply Rule Package.
5. Add the new Package ID *UPGRULU*.
6. Select the Package Processing tab and complete the following steps:
 - a. Select the Import Packages check box.
 - b. For the script location, enter the *PS_HOME/SCRIPTS* directory.
 - c. Select the Compare Package check box.
 - d. Leave the Create Compare Report check box cleared.
 - e. Under Compare Processing, select the Update Statistics check box.
 - f. Select the Upgrade Package check box.
 - g. Under Upgrade Processing, select the Update Statistics check box.
 - h. Under Continue Upgrade Processing, leave the With Errors check box cleared and select the With Warnings check box.
 - i. Click Process.
7. On the Process Monitor page, verify that the job runs to success.

8. Click the “Go back to Apply Rule Package” link.
9. Search for the Package ID UPGRULU and open the package.
10. Select the Package Elements tab.
11. Make sure that the first element displays *Success* in the Results column.

Then scroll down until you see the first element that has the Upgrade check box selected and make sure that the Upgrade Status is *Done*.

If you have issues or need more information, refer to PeopleBooks.

See *PeopleSoft Enterprise 9.0 Global Payroll PeopleBook*, “Using the Utilities.”

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Global Payroll All Countries	All	All

Task 5-8-4: Creating the Final Rule Package

This section discusses:

- Understanding the Final Country Extensions Rule Package
- Applying Element Customizations
- Stamping Modified Rules with a New Version
- Creating and Exporting the Final Country Extensions Rule Package

Understanding the Final Country Extensions Rule Package

In this step, you create the final country extensions rule packages on the upgraded Copy of Production (Source) database. The package will contain all Oracle-delivered as well as customized rule elements for all 17 Global Payroll countries.

Note. If the final country extensions rule package has already been created and exported in a previous Move to Production pass, and no changes to the package are expected in this pass, you do not have to repeat this task. You can reuse the package that was exported in the previous Move to Production pass for application on the Target database.

Applying Element Customizations

In this step, you reapply your element modifications to ensure that they are properly integrated into your upgraded database.

When you reviewed your upgrade compare reports, you had to decide whether to take the Source or Target version of the elements. If you have taken the PeopleSoft-software version of an element over your own modified version, you may need to do some modifications to the new elements 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 elements to apply these modifications.

When you reapply an element modification, it blanks out the corresponding GP_VERSION value on the element (GP_PIN), or the corresponding parent Element Definition record (for example, GP_VARIABLE or GP_FORMULA), or both. In the next task, you will update these blank versions so you can identify the elements where you reapplied modifications.

Stamping Modified Rules with a New Version

In this step, you stamp the modified rules with a new version. You complete version stamping for all elements that you modified during the previous step. This process updates the GP_VERSION field (on GP_PIN, or the parent Element Definition record, or both) with the updated version.

Note. This step must be repeated for each of your licensed country extensions, any new country extensions that you may have created, and also for All Countries if you have created any elements of your own where Country = ALL so that all your customized elements are stamped appropriately.

To stamp modified rules with the new version:

1. From your browser, sign in to your upgraded Copy of Production (Source) database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Version Stamping.
3. If you are stamping elements for a particular country extension, select *Specific Country* in the Used By field and enter the appropriate country in the Country field.
4. If you are stamping elements you have created or modified where Country = ALL, then select *All Countries* in the Used By field.
5. For the stamp type, select *Blank Version*.
6. In the New Version field, enter 9.00.00.00.
7. Click the Stamp GP Records button.

At this time, all elements that do not have a version number will be stamped with version C_9.00.00.00.

Note. PeopleSoft software elements are always delivered with a version number.

8. Repeat this set of steps for each of your licensed country extensions, any new country extensions that you may have created, and also for All Countries if you have created any elements where Country = ALL.

Creating and Exporting the Final Country Extensions Rule Package

To define, create, and export the final country extensions rule package:

1. From your browser, sign in to your upgraded Copy of Production (Source) database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Create/Export Rule Package.
3. Under Find an Existing Value, search for Package ID GPCERUL and open the package.
4. Select the Package Processing tab.
5. Select the Create Package, Create Scripts, and Export Package check boxes.
6. For the script location, enter the *PS_HOME/SCRIPTS* directory for the upgraded Copy of Production (Source) Database.
7. Click Process.
8. On the Process Monitor page, wait for the process to run successfully.

Verify that the program completed with no errors by reviewing the message log. If you encounter any issues or need more information, refer to PeopleBooks.

See *PeopleSoft Enterprise 9.0 Global Payroll PeopleBook*, “Using the Utilities.”

9. Store the generated script and data files.

There will be three scripts and one data file generated in the *PS_HOME/SCRIPTS* and the *PS_HOME/DATA* directories respectively.

They are as follows:

```
GPCERUL_EXP.DMS
GPCERUL_IMP.DMS
GP_CLEANUP.DMS
GPCERUL_DAT.DAT
```

Note. Store the generated script and data files until the final upgrade pass is complete. They will be needed in all the upgrade passes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	MTP	Global Payroll All Countries	All	All

Task 5-8-5: Applying the Final Rule Package

The final country extensions rule package GPCERUL has to be applied on the New Copy of Production (Target) database during the Move to Production pass.

Note. You do *not* have to run the Compare Report while applying GPCERUL.

Note. Before proceeding with this step, ensure that the Process Scheduler is up and running.

To apply the final rule package:

1. Place all the script files of the rule package in the *PS_HOME/SCRIPTS* directory of the New Copy of Production (Target) database. The script files are:

```
GPCERUL_IMP.DMS
GP_CLEANUP.DMS
```

2. Place the data file GPCERUL_DAT.DAT of the rule package in the *PS_HOME/DATA* directory of the New Copy of Production (Target) database.
3. From your browser, sign in to the New Copy of Production (Target) database.
4. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Apply Rule Package.
5. Add the new Package ID *GPCERUL*.
6. Select the Package Processing tab and complete the following steps:

- a. Select the Import Packages check box.
 - b. For the script location, enter the *PS_HOME/SCRIPTS* directory.
 - c. Select the Compare Package check box.
 - d. Leave the Create Compare Report check box cleared.
 - e. Under Compare Processing, select the Update Statistics check box.
 - f. Select the Upgrade Package check box.
 - g. Under Upgrade Processing, select the Update Statistics check box.
 - h. Under Continue Upgrade Processing, leave the With Errors check box cleared and select the With Warnings check box.
 - i. Click Process.
7. On the Process Monitor page, verify that the job runs successfully.
 8. Click the “Go back to Apply Rule Package” link.
 9. Search for Package ID GPCERUL and open the package.
 10. Select the Package Elements tab.
 11. Make sure that the first element displays *Success* in the Results column.

Then scroll down until you see the first element that has the Upgrade check box selected and make sure that the Upgrade Status is *Done*. If you have issues or need more information, refer to PeopleBooks.

Note. If there are errors, you will have to fix them and rerun the compare and upgrade process again.

See *PeopleSoft Enterprise 9.0 Global Payroll PeopleBook*, “Using the Utilities.”

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	Global Payroll All Countries	All	All

Task 5-8-6: Creating the Consolidated NonRule Package

This section discusses:

- Understanding the Consolidated Country Extensions Non-Rule Package
- Creating the Consolidated Country Extensions Non-Rule Package
- Exporting the Consolidated Country Extensions Non-Rule Package

Note. Skip this step if you are only licensing new Global Payroll Country Extensions and not upgrading any country extensions.

Understanding the Consolidated Country Extensions Non-Rule Package

In this step, you create a consolidated non-rule package containing the upgrade system data for all Global Payroll Country Extensions. The package definition UPGGPCE is delivered in the New Release Demo database. The package will contain related language records as well.

Creating the Consolidated Country Extensions Non-Rule Package

To create the consolidated country extensions non-rule package:

1. From your browser, sign in to the New Release Demo (Source) database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Create Non-Rule Package.
3. Search for the existing Package ID UPGGPCE and open it.
4. Select the Package Criteria tab.
5. Click the Create Package button.

Exporting the Consolidated Country Extensions Non-Rule Package

To export the consolidated country extensions non-rule package:

1. From your browser, sign in to the New Release Demo (Source) database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Export Non-Rule Package.
3. Search for existing Package ID UPGGPCE and open it
4. Select the Package Records tab.
5. For the script location, enter the *PS_HOME/SCRIPTS* directory.
6. Click the Create Scripts button.
7. Click the Export button.
8. On the Process Monitor page, wait for the data mover process to complete successfully.
9. Store the generated script and data files.

There will be four scripts and two data files generated in the *PS_HOME/SCRIPTS* and *PS_HOME/DATA* directories, respectively. They will be as follows:

```
UPGGPCE_ELEMENTS_EXP.DMS
UPGGPCE_ELEMENTS_IMP.DMS
UPGGPCE_RECORDS_EXP.DMS
UPGGPCE_RECORDS_IMP.DMS
UPGGPCE_ELEMENTS.DAT
UPGGPCE_RECORDS.DAT
```

Note. Store the generated script and data files until the final upgrade pass is complete. They will be needed in all the upgrade passes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	Global Payroll All Countries	All	All

Task 5-8-7: Creating Individual NonRule Packages

This section discusses:

- Understanding Individual Country Extensions Non-Rule Packages
- Creating the Individual Country Extensions Non-Rule Packages
- Exporting the Individual Country Extensions Non-Rule Packages

Note. Skip this step if you are not licensing any new Global Payroll Country Extensions. This step must be repeated for each new Global Payroll Country Extension you are licensing.

Understanding Individual Country Extensions Non-Rule Packages

Each Global Payroll Country Extension delivers a non-rule package definition named *XXXXSYS* which contains the install system data for that country extension. The package will contain related language records as well. In this step, you create and export the *XXXXSYS* packages for all the country extensions that you are newly licensing, on the New Release Demo (Source) database. This list of packages is given below:

Global Payroll Country Extension	Individual Non Rule Package ID
Australia	AUSSYS
Brazil	BRASYS
France	FRASYS
Germany	DEUSYS
Hong Kong	HKGSYS
India	INDSYS
Italy	ITASYS
Japan	JPNSYS
Malaysia	MYSSYS
Mexico	MEXSYS
Netherlands	NLDSYS
New Zealand	NZLSYS
Singapore	SGPSYS
Spain	ESPSYS
Switzerland	CHESYS
United Kingdom	GBRSYS
United States	USASYS

Creating the Individual Country Extensions Non-Rule Packages

To create the individual country extensions non-rule package:

1. From your browser, sign in to the New Release Demo (Source) database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Create Non-Rule Package.
3. Search for the existing Package ID *XXXSYS* and open it.
4. Select the Package Criteria tab.
5. Click the Create Package button.

Exporting the Individual Country Extensions Non-Rule Packages

To export the individual country extensions non-rule package:

1. From your browser, sign in to the New Release Demo (Source) database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Export Non-Rule Package.
3. Search for the existing Package ID *XXXSYS* and open it.
4. Select the Package Records tab.
5. For the script location, enter the *PS_HOME/SCRIPTS* directory.
6. Click the Create Scripts button.
7. Click the Export button.
8. On the Process Monitor page, wait for the data mover process to complete successfully.
9. Store the generated script and data files.

There will be four scripts and two data files generated in the *PS_HOME/SCRIPTS* and *PS_HOME/DATA* directories, respectively. They will be of the form:

```
XXXSYS_ELEMENTS_EXP.DMS  
XXXSYS_ELEMENTS_IMP.DMS  
XXXSYS_RECORDS_EXP.DMS  
XXXSYS_RECORDS_IMP.DMS  
XXXSYS_ELEMENTS.DAT  
XXXSYS_RECORDS.DAT
```

Note. Store the generated script and data files until the final upgrade pass is complete. They will be needed in all the upgrade passes.

10. Repeat these steps for each new Global Payroll Country Extension that you are licensing.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	Global Payroll All Countries	All	All

Task 5-8-8: Applying the Consolidated NonRule Package

This section discusses:

- Preparing to Apply the Consolidated Country Extensions Non-Rule Package
- Importing the Consolidated Country Extensions Non-Rule Package Elements
- Comparing the Consolidated Country Extensions Non-Rule Package Elements
- Importing the Consolidated Country Extensions Non-Rule Package Records
- Upgrading the Consolidated Country Extensions Non-Rule Package

Note. Skip this step if you are only licensing new Global Payroll Country Extensions and not upgrading any country extensions.

Preparing to Apply the Consolidated Country Extensions Non-Rule Package

Place the stored script and data files associated with the consolidated package in the *PS_HOME/SCRIPTS* and *PS_HOME/DATA* directories of the Target database, respectively. The script and data files required for this step are:

```
UPGGPCE_ELEMENTS_IMP.DMS
UPGGPCE_RECORDS_IMP.DMS
UPGGPCE_ELEMENTS.DAT
UPGGPCE_RECORDS.DAT
```

Importing the Consolidated Country Extensions Non-Rule Package Elements

To import the consolidated country extensions non-rule package elements:

1. From your browser, sign in to the Target database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Import Non-Rule Elements.
3. Add the Package ID UPGGPCE.
4. Select the Package Records tab.
5. For the script location, enter the *PS_HOME/SCRIPTS* directory of your Target database.
6. Click the Import Package button.
7. On the Process Monitor page, verify that the process runs successfully.

Comparing the Consolidated Country Extensions Non-Rule Package Elements

To compare the consolidated country extensions non-rule package elements:

1. From your browser, sign in to the Target database.

2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Compare Non-Rule Package.
3. Search for the Package ID UPGGPCE and open the package.
4. Select the Package Elements tab.
5. Click Compare.
6. A message box appears, indicating that the compare process has completed successfully. You can now proceed to import non-rule package records.

Note. You may also get a message box indicating that the package contains no elements. This is not an issue, and you can ignore the message as it is normal for some packages to not have associated elements.

Importing the Consolidated Country Extensions Non-Rule Package Records

To import the consolidated country extensions non-rule package records, do the following:

1. From your browser, sign in to the Target database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Import Non-Rule Records.
3. Search for Package ID UPGGPCE and open the package.
4. Select the Package Records tab.
5. For the script location, enter the *PS_HOME/SCRIPTS* directory of your Target database.
6. Click the Record Import button.
7. On the Process Monitor page, verify that the process runs successfully.

Upgrading the Consolidated Country Extensions Non-Rule Package

To upgrade the consolidated country extensions non-rule package:

1. From your browser, sign in to your Target database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Upgrade Non-Rule Package.
3. Search for the Package ID UPGGPCE and open the package.
4. Select the Package Records tab.
5. Click Upgrade.

A message box displays “Upgrade Process Completed Successfully.”

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll All Countries	All	All

Task 5-8-9: Applying Individual NonRule Packages

This section discusses:

- Preparing to Apply Individual Country Extensions Non-Rule Packages
- Importing the Individual Country Extensions Non-Rule Package Elements
- Comparing the Individual Country Extensions Non-Rule Package Elements
- Importing the Individual Country Extensions Non-Rule Package Records
- Upgrading the Individual Country Extensions Non-Rule Package

Note. Skip this step if you are not licensing any new Global Payroll Country Extensions. This step must be repeated once for each new Global Payroll Country Extension you are licensing.

Preparing to Apply Individual Country Extensions Non-Rule Packages

Place the stored script and data files associated with the individual country extensions non-rule package in the *PS_HOME/SCRIPTS* and *PS_HOME/DATA* directories of the Target database, respectively. The script and data files required for this step are:

```

XXXSYS_ELEMENTS_IMP.DMS
XXXSYS_RECORDS_IMP.DMS
XXXSYS_ELEMENTS.DAT
XXXSYS_RECORDS.DAT

```

Importing the Individual Country Extensions Non-Rule Package Elements

To import the individual country extensions non-rule package elements:

1. From your browser, sign in to the Target database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Import Non-Rule Elements.
3. Add a Package ID *XXXSYS*.
4. Select the Package Records tab.
5. For the script location, enter the *PS_HOME/SCRIPTS* directory of your Target database.
6. Click the Import Package button.
7. On the Process Monitor page, verify that the process runs successfully.

Comparing the Individual Country Extensions Non-Rule Package Elements

To compare the individual country extensions non-rule package elements:

1. From your browser, sign in to the Target database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Compare Non-Rule Package.
3. Search for the Package ID *XXXSYS* and open the package.
4. Select the Package Elements tab.
5. Click Compare.
6. A message box appears indicating that the compare process has completed successfully. You can now proceed to import non-rule package records.

Note. You may also get a message box indicating that the package contains no elements. This is not an issue, and you can ignore the message as it is normal for some packages to not have associated elements.

Importing the Individual Country Extensions Non-Rule Package Records

To import the individual country extensions non-rule package records:

1. From your browser, sign in to the Target database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Import Non-Rule Records.
3. Search for the Package ID *XXSYS* and open the package.
4. Select the Package Records tab.
5. For the script location, enter the *PS_HOME/SCRIPTS* directory of your Target database.
6. Click the Record Import button.
7. On the Process Monitor page, verify that the process runs successfully.

Upgrading the Individual Country Extensions Non-Rule Package

To upgrade the individual country extensions non-rule package:

1. From your browser, sign in to your Target database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Upgrade Non-Rule Package.
3. Search for the Package ID *XXSYS* and open the package.
4. Select the Package Records tab.
5. Click Upgrade.

A message box displays “Upgrade Process Completed Successfully.”

6. Repeat these steps for each new Global Payroll Country Extension you are licensing.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll All Countries	All	All

Task 5-8-10: Creating the Rule Delete Package

This section discusses:

- Understanding Country Extensions Rule Delete Package
- Creating the Country Extensions Rule Delete Package Definition
- Creating the Country Extensions Rule Delete Package
- Exporting the Country Extensions Rule Delete Package

Note. Before proceeding with this step, ensure that the Process Scheduler is up and running.

Understanding Country Extensions Rule Delete Package

In this step, you create and export your upgrade rule delete package. The rule delete package includes all Oracle-delivered elements to be deleted from your Target database.

Creating the Country Extensions Rule Delete Package Definition

To create the rule delete package definition:

1. Sign in to your Copy of Production (Target) database using Application Designer.
2. Open the Application Engine UPG_GPCEDDEL.
3. Run the Application Engine UPG_GPCEDDEL from Application Designer using the run control ID *UPGDEL*.

Note. Be sure that you are using the correct run control ID *UPGDEL*.

The Application Engine will create a package definition called UPGRULD.

Creating the Country Extensions Rule Delete Package

In this step, you create the country extensions rule delete package UPGRULD.

To create the rule delete package:

1. From your browser, sign in to the Copy of Production (Target) Database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Create/Export Rule Package.
3. On the Find an Existing Value tab, search for UPGRULD and open the package definition.
4. Select the Package Processing tab.
5. Select the Create Package check box.
6. Click Process.
7. On the Process Monitor page, wait for the process to run successfully.
8. Click the “Go back to Create/Export Rule Package” link.
9. On the Find an Existing Value tab, search for the Package ID UPGRULD and open the package.
10. Select the View Package tab.

You will see a list of elements to be deleted.

11. If there are any Oracle-delivered elements that you do not want to delete, clear the Upgrade check box corresponding to that element. If you have issues or need more information, refer to PeopleBooks.

See *PeopleSoft Enterprise 9.0 Global Payroll PeopleBook*, “Using the Utilities.”

Note. The elements you want to keep will be owned by you in the new release.

12. Click Save.

Exporting the Country Extensions Rule Delete Package

In this step, you export the country extensions rule delete package UPGRULD.

To create scripts and export the rule delete package:

1. From your browser, sign in to the Copy of Production (Target) Database.
2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Create/Export Rule Package.
3. On the Find an Existing Value tab, search for UPGRULD and open the package definition.
4. Select the Package Processing tab.
5. Select the Create Scripts and Export Package check boxes.
6. For the script location, enter the *PS_HOME/SCRIPTS* directory for the New Release Demo database.
7. Click Process.
8. On the Process Monitor page, wait for the process to run successfully.

Verify that there are no errors by checking the message log. If you have issues or need more information, refer to PeopleBooks.

See *PeopleSoft Enterprise 9.0 Global Payroll PeopleBook*, “Using the Utilities.”

9. Store the generated script and data files.

There will be three scripts and one data file generated in the *PS_HOME/SCRIPTS* and *PS_HOME/DATA* directories, respectively. They will be as follows:

```
UPGRULD_EXP.DMS
UPGRULD_IMP.DMS
GP_CLEANUP.DMS
UPGRULD_DAT.DAT
```

Note. Store the generated script and data files until the final upgrade pass is complete. They will be needed in all the upgrade passes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Global Payroll All Countries	All	All

Task 5-8-11: Applying the Rule Delete Package

This section discusses:

- Preparing to Apply the Country Extensions Rule Delete Package
- Importing and Comparing the Country Extensions Rule Delete Package
- Upgrading the Country Extensions Rule Delete Package
- Completing the Rule Delete Process

Preparing to Apply the Country Extensions Rule Delete Package

Before applying the rule delete package, you have to run an Application Engine that prepares your database for rule deletion.

To prepare the database:

1. Sign in to the Target database using Application Designer.
2. Open the Application Engine UPG_GPCEDL
3. Run the Application Engine UPG_GPCEDL from Application Designer using the run control ID *UPGBGN*.

Note. Be sure that you are using the correct run control ID *UPGBGN*.

Importing and Comparing the Country Extensions Rule Delete Package

The country extensions rule delete package has to be applied on the Copy of Production (Target) database during all the passes.

Note. Before proceeding with this step, ensure that the Process Scheduler is up and running.

To import and compare the package:

1. Place all the script files of the rule package in the *PS_HOME/SCRIPTS* directory of the Copy of Production (Target) database. The script files are:

```
UPGRULD_IMP.DMS
GP_CLEANUP.DMS
```

2. Place the data file *UPGRULD_DAT.DAT* of the rule package in the *PS_HOME/DATA* directory of the Copy of Production (Target) database.
3. From the browser, sign in to the Copy of Production (Target) database.
4. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Apply Rule Package.
5. Open the *UPGRULD* package, as follows:
 - During the Initial pass, search for the *UPGRULD* package ID that already exists on the Target database and open the package.
 - During the Move to Production pass, add a new package ID *UPGRULD* and open the package.
6. Select the Package Processing tab and complete the following steps:
 - a. Select the Import Packages check box.
 - b. For the script location, enter the *PS_HOME/SCRIPTS* directory.
 - c. Select the Compare Package check box.
 - d. Select the Create Compare Report check box.
 - e. Select the Errors/Warnings and Deleted check boxes, and leave the other options under Compare Report Print Options cleared.
 - f. Under Compare Processing, select the Update Statistics check box.
 - g. Click Process.

Note. During the Initial pass, a message box will appear with the message “Source and the Target databases are the same for this import/compare/upgrade. The Source and Target databases are the same for the import or compare or upgrade process. Upgrading a package in the database it was created in can result in lost data.” Click OK on the message box and continue.

7. On the Process Monitor page, verify that the job runs successfully.
8. Click the “Go back to Apply Rule Package” link.
9. Search for the Package ID UPGRULD and open the package.
10. Select the Package Elements tab.
11. View the elements with errors or warnings in the Results column.

Many elements will be in error because they are still connected to other elements or referenced elsewhere. Identify the references to these elements and remove them, or if applicable you may clear the Update check box corresponding to the element to take ownership of the element.

If a failure occurs, review the following information, make any needed changes, and rerun this step if required.

- Failure, Element does not exist: This indicates that you do not currently have that element in your database, so no delete is required. No further action is necessary; the element can be left in failure status and the Upgrade check box can be left selected.
- Failure, Used in Rule Defn: This indicates that a child element that is to be deleted is referenced by one or more parent elements in your database. These parent elements may be your own customized elements or they could be other elements that are included in the delete package. You can use the view element relationships functionality to determine how the child element to be deleted is currently referenced. If you want to proceed with the deletion, go to the parent element definitions and remove references to the child element. This process is known as unhooking. Once elements have been unhooked, compare your country extension delete package again and the compare results should no longer indicate a failure for the relevant child elements. If you do not want the elements to be deleted, no further action is necessary; the elements can remain in failure status and the Upgrade check boxes can be left selected. The elements will not be deleted in the upgrade package step.

Review the Rule Package Compare Report PDF file that was generated for detailed information about which elements are in an error or warning status, as well as whether an element is being deleted. This is a field-by-field compare report. For more information on errors and warnings, see PeopleBooks.

See *PeopleSoft Enterprise 9.0 Global Payroll PeopleBook*, “Using the Utilities.”

Note. Make sure the exact same elements are selected to be deleted for the Initial and Move to Production passes.

Note. Repeat the compare process until there are no more errors or you are confident that the errors may be ignored. To run the compare process only, repeat the same steps above, but do *not* select the Import Packages check box and enter the script location.

Upgrading the Country Extensions Rule Delete Package

To upgrade the Country Extensions Rule Delete Package:

1. From your browser, sign in to the Copy of Production (Target) database.

2. Select Set Up HRMS, Product Related, Global Payroll & Absence Mgmt, Elements, Manage Global Payroll Packages, Apply Rule Package.
3. Search for the UPGRULD package ID that already exists on the Target database and open the package.
4. Select the Package Processing tab and complete the following steps:
 - a. Select the Upgrade Package check box.
 - b. Under Upgrade Processing, select the Update Statistics check box.
 - c. If you have errors reported during the compare process that you wish to ignore, select the With Errors check box under Compare Upgrade Processing.
 - d. Under Continue Upgrade Processing, select the With Warnings check box.
 - e. Click Process.
5. On the Process Monitor page, verify that the process runs successfully.
6. Click the “Go back to Apply Rule Package” link.
7. Search for the Package ID UPGRULD and open the package.
8. Select the Package Elements tab.
9. Make sure that the first element that has the Upgrade check box selected displays *Success* in the Results column and the Upgrade Status is *Done*.

Completing the Rule Delete Process

After applying the rule delete package, you have to run an Application Engine that performs some further modifications on your database that completes the rule delete process. Not running the Application Engine could cause problems on your database.

To complete the rule delete process:

1. Sign in to the Target database using Application Designer.
2. Open the Application Engine UPG_GPCEDDEL.
3. Run the Application Engine UPG_GPCEDDEL from Application Designer using the run control ID *UPGEND*.

Note. Be sure that you are using the correct run control ID *UPGEND*.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll All Countries	All	All

Task 5-8-12: Finalizing the Rule Delete Process

During the rule delete process, you decided to keep certain elements that were originally delivered by Oracle. In this step, the ownership of those rule elements will be transferred to you. This step should be run in the *final* Move to Production pass only.

Note. Perform this step in the *final* Move to Production pass only.

To finalize the rule delete process:

1. Sign in to the Target database using Application Designer.
2. Open the Application Engine UPG_GPCEDDEL
3. Run the Application Engine UPG_GPCEDDEL from Application Designer using the run control ID *UPGFIN*.

Note. Be sure that you are using the correct run control ID *UPGFIN*.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	MTP	Global Payroll All Countries	All	All

Task 5-8-13: Updating Install Options on the Target Database

In this step, you update the install options for the newly licensed country extensions on your Target database.

Note. Skip this step if you are not licensing any new Global Payroll Country Extensions.

To update the install options:

1. From your browser, sign in to the Target database.
2. Select Set Up HRMS, Install, Installation Table.
3. Click the Installed GP Countries link.
4. Select the check boxes corresponding to all of the newly licensed Global Payroll Country Extensions.
5. Click OK.
6. Click Save.

Note. You can ignore the message that appears when you click the Save button.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll All Countries	All	All

Task 5-8-14: Setting the Store Option for System Elements

In this step, you run a script that selects the Store option for system elements, depending on which Global Payroll Country Extensions are installed on your database. Some Country Extensions require the Store option to be selected for certain system elements where the Store option is not selected by default.

To run the script:

1. Sign in to the Target database using Data Mover.
2. Open and run the script UVHCGPS01.DMS.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll All Countries	All	All

Task 5-8-15: Exporting HR Rate Codes

In this step, you have the option to bring in any new HR rate code elements that are referenced by a Global Payroll rate code element in a country extension that you have licensed, because these HR rate codes are not automatically upgraded. To do this, you run a script to export the HR rate codes referenced by Global Payroll rate code elements for your licensed country extensions from your New Release Demo database. In the next step, you load them into your Copy of Production (Target) database. You will use the data exported here in any Move to Production passes. If the HR rate code already exists in your database, this process will not override your data.

Note. The export and corresponding import have conditional logic that is based on installation indicators so that only HR rate codes referenced by the Global Payroll country extensions you have licensed will be brought over. If you only want to copy over HR rate codes for a subset of the country extensions you have licensed, you should modify the GPCERATE_EXP.DMS script before running it and comment out the export logic for the licensed country extensions that you do not want to copy over, because by default, only those for your licensed country extensions will be exported as well, based on your installation indicators.

To export the new HR rate codes, run the following script using Data Mover against your New Release Demo Database.

```
PS_HOME\SCRIPTS\GPCERATE_EXP.DMS
```

Note. Store the generated data file GPCERATE.DAT until the final upgrade pass is complete. It will be needed in all the upgrade passes.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Source	Initial	Global Payroll All Countries	All	All

Task 5-8-16: Importing HR Rate Codes

In the previous step, during the Initial upgrade pass you exported new HR rate code elements that are referenced by a Global Payroll rate code element in a country extension that you have licensed if you wanted to upgrade them, because these HR rate codes are not automatically upgraded. In this step, you load them into your Copy of Production (Target) database. If the HR rate code already exists in your database, this process will not override your data.

To import the new HR rate codes, run the following script using Data Mover in bootstrap mode against your Copy of Production database.

```
PS_HOME\SCRIPTS\GPCERATE_IMP.DMS
```

Note. If you are a DB2 z/OS customer, follow the instructions in the script GPCERATE_IMP.DMS to work properly in your environment.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll All Countries	All	All

Task 5-9: Updating Payroll Interface Definitions

This section discusses:

- Understanding Updates to Payroll Interface Definitions
- Running Validate PI Field References Report
- Updating PS Table Definitions
- Updating Field Definition Table
- Updating Instance Table Definitions

Understanding Updates to Payroll Interface Definitions

In this task you perform steps to update the PeopleSoft Payroll Interface Definitions.

Note. Perform this task only if you have PeopleSoft Payroll Interface and currently have field entries that use record (table) names impacted by structural changes in the new PeopleSoft release.

A number of enhancements were made in the new PeopleSoft release that involved record structure changes that may impact Payroll Interface. Some of your existing Payroll Interface definitions may not be valid as a result of these changes. You must review your Payroll Interface definitions and update PS Table, Field Definition Table, and Instance Table, if needed.

Before updating Payroll Interface definitions, you need to do an analysis of structural changes in the new PeopleSoft release, to properly locate all impacted records and fields.

Task 5-9-1: Running Validate PI Field References Report

In this step, you run a report that lists all invalid record and field references as a result of new and modified record structures.

To run the Validate PI Field References report:

1. From your browser, sign on to your Copy of Production database, keeping the default browser address.

2. Select Set Up HRMS, Upgrade, Reports, Validate PI Field References.
3. Click Add a New Value.
4. Enter the run control ID *UPG_PI_DEFN*.
5. Click Add.
6. From the Check PI Definitions page, click Run.
7. Analyze the data presented in the report to decide whether any changes to Payroll Interface definitions are needed.

The report has three different sections:

- Invalid references in PS Tables
- PI Field Tbl
- PI Instance Tbl

If the report lists any data in any section, proceed with updating the corresponding definitions in the following steps.

Properties

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

Task 5-9-2: Updating PS Table Definitions

In this step, you update any invalid references in PS Tables.

To update PS Table Definitions:

1. From your browser, sign on to your Copy of Production database, keeping the default browser address.
2. Select Set Up HRMS, Product Related, Payroll Interface, Interface Controls, PS Tables, Find an Existing Value.
3. Enter a Payroll Interface system ID listed in the PS Tables section of the Validate PI Field References report, if you see any.
4. Click Search.
5. Select Record (Table) Name listed in the PS tables section of the Validate PI Field References report.
6. On the PS Tables page, review and update the Field Details area.
7. Delete the fields from the Field Details of the records where they used to be.
Then add the fields to the records where they were moved in this release.
8. Repeat steps 2 through 7 for each record listed in the PS Tables section of the report.

Properties

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

Task 5-9-3: Updating Field Definition Table

In this step, you update any invalid references in the PI Field Definition Table.

To update the Field Definition Table:

1. Select Set Up HRMS, Product Related, Payroll Interface, Interface Controls, Field Definition Table, Find an Existing Value.
2. Enter a Payroll Interface system ID, Payroll Interface field ID, and process type for fields listed in the PI Field Tbl section of the Validate PI Field References report, if you see any.
3. Click Search.
4. On the Interface Field2 page, review and update the field definition.
5. Repeat steps 1 through 4 for each field listed in the PI Field Tbl section of the report.

Properties

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

Task 5-9-4: Updating Instance Table Definitions

In this step, you update any invalid references in the PI Instance Table.

To update Instance Table definitions:

1. Select Set Up HRMS, Product Related, Payroll Interface, Interface Controls, Instance Table, Find an Existing Value.
2. Enter a Payroll Interface system ID and instance ID listed in the PI Instance Tbl section of the Validate PI Field References report, if you see any.
3. Click Search.
4. Review and update the PeopleSoft Record Name and PeopleSoft Field1 Name fields.
5. Repeat steps 1 through 4 for each instance ID listed in the PI Instance Tbl section of the report.

Properties

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

Task 5-10: Verifying Record and RecordField References

In this step, you run a report that lists any invalid record and record-field references in arrays, writable arrays, and trigger definitions. After records have been upgraded, some of the arrays, writable arrays, or trigger definitions could still be referring to old records or record-fields that no longer exist on the upgraded database. After running the report, you should modify these arrays, writable arrays, and trigger definitions so that they point to appropriate records or record-fields, or remove them completely if no longer needed.

To run the invalid record and record-field references report:

1. From your browser, sign on to the Target database.
2. Select Set Up HRMS, Upgrade, Reports, Invalid Rec/Rec-Field Refs.
3. Click Add a New Value.
4. In the Run Control field, enter *UPG_GP_INVALID_REC_FLD_REFS* and click Add.
5. Click Run.
6. On the Process Scheduler Request page, click OK.
7. Review the report and remove any invalid record and record-field references from the arrays, writable arrays, and trigger definitions accordingly.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll Core	All	All

Task 5-11: Updating Jobs and Process for GP Packager

This section discusses:

- Understanding Updates for Global Payroll Packager
- Updating Job Definitions for GP Packager
- Updating the Process Definition for GP Packager

Understanding Updates for Global Payroll Packager

In PeopleSoft 9, the SQR Report GP00PK01 has to be run on an NT Process Scheduler. Prior to PeopleSoft 9, the DataMover processes (GP_EXP, GP_IMP) had to be run on an NT Process Scheduler and this continues to be true. In PeopleSoft 9, the delivered job definitions run multiple Global Payroll Packager processes in order to streamline the overall process. As a result, the job definitions that contain either the SQR report or the Data Mover processes have to be scheduled to be run on an NT Process Scheduler. You need to update the following definitions for Global Payroll Packager:

- Job definitions
- Process definition

Task 5-11-1: Updating Job Definitions for GP Packager

The following job definitions need to run on an NT Process Scheduler.

- GPCMPRPT: Rules Package Compare Report
- GPCMPRU: Compare & Upgrade with Report
- GPCRSCTE: Create Package & Scripts & Export
- GPEXP: Export Rule Packages
- GPICMP: Import Rule Package & Compare
- GPICMPRU: Import & Compare & Upgrade with Report
- GPICMPU: Import & Compare & Upgrade
- GPIMP: Import Rule Packages
- GPSCTE: Create Scripts & Export Package

To update the job definitions above to run on an NT Process Scheduler:

1. Select PeopleTools, Process Scheduler, Jobs.
2. Open the page for one of the job definitions listed above.
3. Select the Job Definition Options tab.
The Server Name field contains the value *PSNT*.
4. For the Server Name field, select the value of the NT Process Scheduler that was set up during your installation
5. Repeat steps 2 through 4 for each of the job definitions listed above.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll Core	All	All

Task 5-11-2: Updating the Process Definition for GP Packager

The process for SQR Report GP00PK01 also needs to have the server name of an NT Process Scheduler.

To update the process definition:

1. Select PeopleTools, Process Scheduler, Processes.
2. Click the Advanced Search link on the Search page.
3. Use the search criteria Process Type = SQR Report and Process Name = GP00PK01, and open the page.
4. Select the Process Definition Options tab.
5. For the Server Name field, select the value of the NT Process Scheduler that was set up during your installation

The DataMover processes (GP_EXP and GP_IMP) should continue to have the server name of an NT Process Scheduler.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Global Payroll Core	All	All

Task 5-12: Upgrading Rules

This section discusses:

- Understanding Rules Upgrade
- Recompiling Template Built Rules
- Customizing Template Built Rules
- Reviewing and Modifying User Exit Rules

Understanding Rules Upgrade

This task applies only if you are upgrading the PeopleSoft HRMS Time and Labor product. Many SQL objects may have been modified for performance and functionality enhancements.

Task 5-12-1: Recompiling Template Built Rules

All rules that you have built from rule templates need to be recompiled. To recompile Template-Built Rules, you will need to follow the steps below.

To recompile Template-Built Rules:

1. If you are using Referential Integrity, export any data you have in `TL_RI_CNTRL_TBL` before you clear the Production Environment check box option on the Time and Labor Installation page.

This table will be deleted once you clear the check box, and you will re-import this data later in the procedure.
2. Select Set Up HRMS, Install, Product and Country Specific, Time and Labor Installation.
3. Clear the Production Environment check box, as shown below, and click Save.

Menu

- Contributor Relations
- Set Up HRMS
 - Install
 - Product and Country Specific
 - Company Directory
 - FPS Installation Parameters
 - Country Table - HR
 - Time and Labor Installation
 - Profile Management Installatn
 - ePerformance: General Settings
 - Load Postal Codes CHE
 - Load Cities ITA
 - AA Setup for Existing BUS JPN
 - Postal Codes JPN
 - Load Postal Codes JPN
 - Load Postal Codes NLD
 - Recruiting Installation
 - NID Prefix GBR
 - Installation Table
 - Country Table
 - Regulatory Region
 - State/Province
 - Regional Transactions
 - Person Object Installation
 - Country Table Report

[New Window](#) | [Custor](#)

TL Installation | Configurations | Manager Search Defaults | Email Notification

Time and Labor Installation

System Options

☐ Production Environment
 ☒ Interface with PS/EPM
 ☒ Interface with PS/Projects

☐ Referential Integrity
 ☒ Publish unmapped TRC as No Pay
 ☒ Calculate Estimated Gross

TL/NA Payroll Options

Number of Months to Process: 24
 ☒ Process Prior Paygroup Time with Current Paygroup

Concurrent Load Time and Labor Cleanup: 1
 ☒ Concurrent Load Time and Labor Runs

☒ Set Ignore Status for Not Ok to Pay

Validation Options

*Leave Balances: On-line and Batch
 Validation Set: ST_ALL

*Compensatory Balances: On-line and Batch
 Chartfields Validation: None

Time Administration Options

☒ Automatic Time Admin Run
 ☒ Continue with Exceptions

Max Employees in a Batch: 10000
 ☒ Include Multiple Jobs

On-line Rules Options

☒ Run On-line Rules
 Maximum On-line Rules: 25

TCD File Integration

Outbound File Directory: c:\temp\

Time and Labor Installation page

- Select Set Up HRMS, Product Related, Time and Labor, Rules and Workgroups, Template-Built Rules.
- Instead of entering any values in any field, click Search to display all the Template-Built Rules in your system.

Menu

- Academic Advising
- Contributor Relations
- SA Self Service
- Set Up HRMS
 - Install
 - Security
 - Upgrade
 - Foundation Tables
 - Common Definitions
 - Common Components
 - Product Related
 - Recruiting
 - Workforce Administration
 - Base Benefits
 - Automated Benefits
 - eBenefits
 - Benefits NLD
 - Compensation
 - Stock
 - Time and Labor
 - Time Periods
 - Time Reporting
 - Rules and Workgroups
 - Value List
 - Template-Built Rules
 - Attendance Programs
 - Rule Programs
 - Workgroup
 - Task Elements
 - Task Configurations
 - Schedules
 - Validation Criteria
 - Time Collection

Template-Built Rules

Enter any information you have and click Search. Leave fields blank for a list of all values.

[Find an Existing Value](#)
[Add a New Value](#)

Template Type: =
 Rule Template: begins with
 Rule ID: begins with

[Search](#)
[Clear](#)
[Basic Search](#)
[Save Search Criteria](#)

Search Results

View All First 1-100 of 109 Last

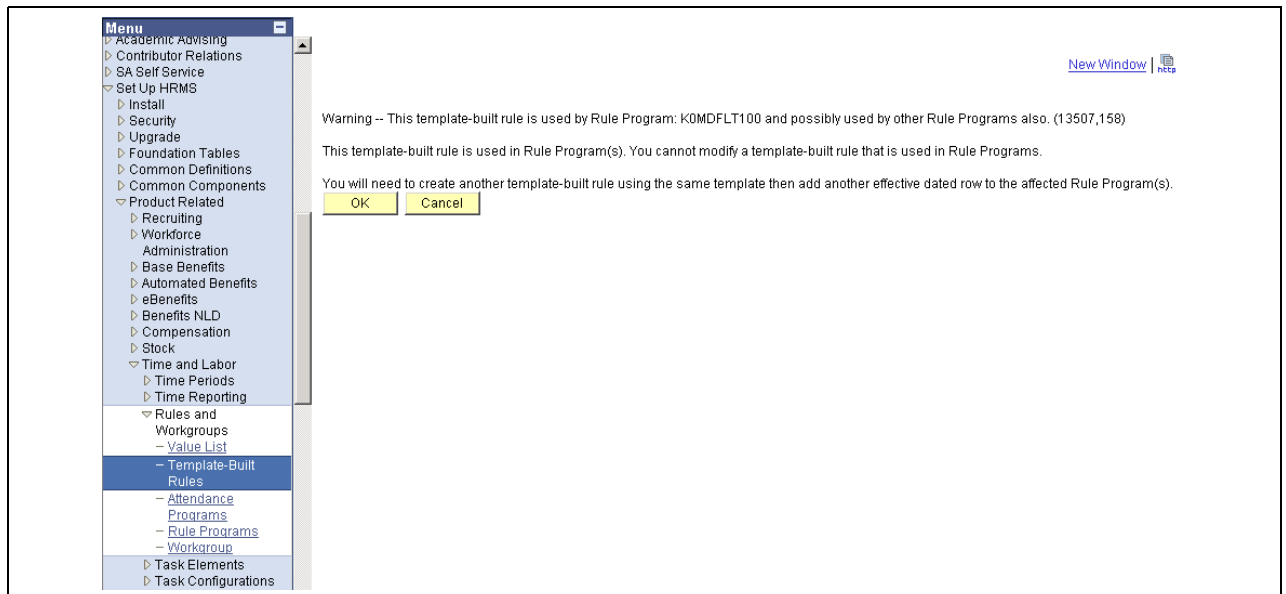
Rule ID	Description
GXAMDFLT	Absence Management Default
GXTLDFLTRC	GXTLPRG DEFAULT TRC
K0MDFLT100	Default TRC 100
K0MDFLTRGR	Default TRC K0RGR
K0WDFLT	Absence Management Default
KABONAPP	Bonus Approval
KACALLOUT	Guaranteed 4 Hours Pay
KACALLOUT1	Callout Pay on Unscheduled Day
KADFLTRC	Default TRC (Meal & Break)
KADFTRC1	Default TRC (Break)
KADFTRC2	Default Salary TRC KARSL
KA0VT1.5	Daily Time and Half Overtime
KA0VT2.0	Pay Double Time After 1.0 Hours

Template-Built Rules page

- Select each rule to review it, making changes if required, then click Save.

Saving the component will recompile the rule for you. If no changes are required, you will need to make some minor change to trigger the save. It is recommended that you change the Short Description field by either changing the current text or copying the AE Section field and pasting it into the Short Description field.

If the rule being recompiled is included in rule programs, a warning message similar to this one will be displayed:



Template-Built Rules - warning page

7. After you have finished recompiling all of your Template-Built Rules, select the Production Environment check box option on the Time and Labor Installation page to enable the Referential Integrity process.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Time and Labor	All	All

Task 5-12-2: Customizing Template Built Rules

This section discusses:

- Understanding Template-Built Rules Customizations
- Customized Template-Built Rules
- Rules Created from Actions and Conditions or SQL Objects

Understanding Template-Built Rules Customizations

In this step you customize your Template-Built Rules as well as review and make changes to rules created from Actions and Conditions or SQL objects.

Customized Template-Built Rules

Changes to SQL statements have to be made on the Define Actions, Define Conditions, or SQL Objects pages. To review custom rules, select Set Up HRMS, System Administration, Utilities, Build Time and Labor Rules, Rules, and enter the first few characters of the rule ID that will follow your naming convention for custom rules, as shown in the example below:

Rules

Enter any information you have and click Search. Leave fields blank for a list of all values.

[Find an Existing Value](#) [Add a New Value](#)

Rule ID: begins with

Description: begins with

☐ Case Sensitive

[Search](#) [Clear](#) [Basic Search](#) [Save Search Criteria](#)

Search Results

View All First 1-100 of 180 Last

Rule ID	Description
GXAMDFLT	Absence Management Default
GXTLDFLTRC	GXTLPRG DEFAULT TRC
K0MDFLT100	Default TRC 100
K0MDFLTRGR	Default TRC K0RGR
K0WDFLT	Absence Management Default
KABONAPP	Bonus Approval
KACALLOUT	Guaranteed 4 Hours Pay
KACALLOUT1	Callout Pay on Unscheduled Day
KADFLTRC	Default TRC (Meal & Break)
KADFTRC1	Default TRC (Break)
KADFTRC2	Default Salary TRC KARSL
KAQVT1.5	Daily Time and Half Overtime

Rules page

Rules Created from Actions and Conditions or SQL Objects

For rules created from Actions and Conditions or SQL objects, you need to review and make necessary changes as mentioned in the Customized Template-Built Rules section above. If you used delivered rules objects (Actions and Condition, SQL Objects, or Temp Tables) in your custom rules without any modifications, you only need to recompile them.

To recompile custom Template-Built rules:

1. Select Set Up HRMS, System Administration, Utilities, Build Time and Labor Rules, Rules.
2. On the Define Rule Header tab, click the Compile Rule button.

Menu

- Financial Aid
- Student Financials
- Academic Advising
- Contributor Relations
- Set Up HRMS
 - Install
 - Security
 - Upgrade
 - Foundation Tables
 - Common Definitions
 - Product Related
 - System Administration
 - Utilities
 - Convert Currency
 - Build Time and Labor Rules
 - Working Tables
 - Relationship Definitions
 - Rules
 - Copy Rules
 - SQL Objects
 - Copy SQL Objects
 - Actions
 - Copy Actions
 - Conditions
 - Copy Conditions
 - Analyze Time and Labor
 - French Public Sector
 - Search/Match
 - Generate
 - RELLANG.SQL
 - Portal Analysis
 - Invoke Core CIs

Define Rule Header **Define Rule Steps**

Rule ID: GXTLDFLTRC Compile Rule Rule SQL Text

Rule Header Definition

*Description: GXTLPRG DEFAULT TRC Short Description: GXTLPRG D

*Time Period ID: PSDAY AE Section: GXTLDFLT

☐ User Exit? ☒ Core Component *Run Location: Batch Only

Compiled?: Y Last Compiled: 07/05/2006 11:29:58.823000AM

Explanation: This rule will assign any hours without a Time Reporting Code (TRC) to TRC GXRWRK.

Define Rule Header page

If you have cloned delivered rules objects and modified them to be used in your custom rules, you need to review and modify these custom rules. You will need to either make changes directly in the current rules objects (cloned and modified in your previous PeopleSoft release) or clone PeopleSoft 9.0-delivered rules objects to modify. Then you will need to recompile these rules.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Time and Labor	All	All

Task 5-12-3: Reviewing and Modifying User Exit Rules

If you have created any rules as User-Exits, you need to review and modify them directly in the rules Application Engine library, TL_TA_RULES.

To review and modify User-Exit rules:

1. Launch Application Designer.
2. Open the Application Engine program TL_TA_RULES.
3. On the Application Engine Definition page, look for the Application Engine section.
4. Modify your SQL steps, as appropriate, to accommodate any changes.
5. Click Save to save the Application Engine section.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	Time and Labor	All	All

Task 5-13: Validating EE Garn Payee Data

This section discusses:

- Understanding EE Garn Payee Data Validation
- Running the EE Garn Payee Data Validation Report
- Updating Garn Payee Data

Understanding EE Garn Payee Data Validation

In this task you perform steps to update payee data on garnishment orders, if needed.

Note. Run this task only if you are using AP Interface and run the Exporting Non-Tax Deductions program.

See Appendix: “Understanding Garnishments Changes.”

Task 5-13-1: Running the EE Garn Payee Data Validation Report

In this step, you run a report that lists garnishment orders whose payee has either different invoicing and remitting Vendor ID or multiple locations.

To run the EE Garn Payee Data Validation Report:

1. Sign on to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Reports, EE Garn Payee Data Validation.
3. Click Add a New Value.
4. Enter the run control ID *UPG_GARN_PAYEE*.
5. Click Add.
6. On the EE Garn Payee Data page, click Run.
7. Analyze the data presented in the report to decide if any input is needed.

The report has four different sections:

- Active orders with different invoicing and remitting Vendor ID.
- Inactive orders with different invoicing and remitting Vendor ID.
- Active orders with multiple locations.
- Inactive orders with multiple locations.

If there is any active order listed in the report, you are expected to review it and decide if you need to make any changes or not. The active orders have the status Approved or Received and they will continue to be processed after the upgrade. If the payee data is not correct, the Extract Non-Tax Deduction program will not create the invoice correctly or it will not create the invoice at all, depending on your setup.

This report will insert all active orders listed in the report into a new record that will be accessible in the online component. The next step provides instructions for accessing the online component and making the updates.

If there is any inactive order listed in the report, it is up to you to decide whether you want to make any updates to history data or not. Because these orders do not have Approved or Received status, they will not be processed in subsequent pay calculations and leaving them as is will not have any impact on creating the invoices.

The inactive orders will not be automatically inserted and available in the online component. If you decide you want to make the updates to history data, you can access the online component and manually add the orders you want to update. The next step provides instructions for accessing the online component and adding the history records.

This report will run in each upgrade pass, but it will only list the data that you need to review; for example, the initial pass listed 10 active orders, which you have reviewed and updated. The Move to Production passes will list additional orders only if you have created a new order between two passes that matches the report selection criteria; otherwise, it will be empty.

Note. If the final Move to Production pass lists any data in this report and you decide you need updates, you will do the updates directly in Create Garnishments or Payee Table in your production database before you go live.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Payroll for North America	All	All

Task 5-13-2: Updating Garn Payee Data

This section discusses:

- Understanding Updating Garn Payee Data
- Updating Active Garnishment Orders
- Updating Garnishment Orders After Final Move to Production Pass
- Adding Inactive Garnishment Orders

Understanding Updating Garn Payee Data

In this step, you update payee data on active garnishment orders, if needed, or add inactive garnishment orders that have payee data you want to update.

Updating Active Garnishment Orders

To update active orders:

1. Sign on to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Define Defaults, Upgrade EE Garnishment Orders.
3. Select the Upgrade Garn Spec tab.

4. Review the data and update the Location and Remit Address fields, if needed.
5. Click Save.

There are several things to keep in mind when you are reviewing the data on this page:

- The orders are inserted here because they match certain criteria, but that does not mean the data really needs to be updated. For example, payee XYZ has two locations and two remit addresses. Order ABC has payee XYZ with location 1 and remit address 1, order DEF has payee XYZ with location 2 and remit address 2. Both orders will be listed on this page because their payee has multiple locations, but the location and remit address might be correct for each order. If that is true, you do not have to do anything; the conversion will use the prepopulated data to do updates in the next upgrade pass, but the data will not really change. If you think that order DEF should also have location 1 and/or remit address 1, you should make the update on this page and the conversion programs will use your input to update the data on the garnishment order in the next pass.
- You can only update the Location and Remit Address fields for the orders that are automatically inserted by the validation report onto this page.

You will get an error message if you try to update any other field in the row.

- You can delete the row on this page, but when you run the report the next time, the validation will find all orders that match the selection criteria and insert the same row again, if it is still applicable.

The same criteria will most likely still be applicable, unless you have changed the payee setup in the Payee Table between upgrade passes.

- The Used field on this page may have multiple values.

This field is display only because it keeps track of why data is inserted, whether data passed through conversion, and whether data updated the real garnishment order or not. Review the translate values for this field to see details about each value. The rows created by the first section of the report will have the value *D* in the Used field because they have a payee with different invoicing and remitting vendors. The rows created by the third section of the report will have the value *L* in the Used field because they have a payee with multiple locations.

- If the payee has setup that matches both criteria, it will be listed and inserted into this page only once.

You will have to ensure your input will correctly update data for both scenarios.

- In the following pass, the Used field will have a different value, depending on whether it actually updated the real order or not.

The conversion program will update the value of this field to *U* when the orders are updated, which will happen if the Location and Remit Address fields have any values. The conversion program will update the value of this field to *X* when the orders are not updated, which will happen if the Location or Remit Address fields do not have any values.

- The Used field will be very important after running the final upgrade pass.

If there is any row in the data with the value *D* or *L* in the Used field, you will have to access the garnishment order and do manual updates where applicable, because there will be no more upgrade conversion after the last validation. These entries would be created by the last validation report and most likely would be for the garnishment orders that were newly created in the Copy of Production since the last time you took the copy.

Updating Garnishment Orders After Final Move to Production Pass

To manually update garnishment orders after the final Move to Production pass:

1. Sign on to the Copy of Production database.

2. Select Payroll for North America, Employee Pay Data <country>, Deductions, Create Garnishments where country is, for example, CAN, USA, or USF.
3. Enter the employee ID and company that needs manual updates.
4. Click Search.
5. If there is more than one garnishment order for the same employee, select the row with the garnishment ID that needs to be manually updated.
6. Select the Garnishment Spec Data 2 tab.
7. Update any of the following fields, as needed: SetID, Vendor ID, Location, Remit Address.
8. Click Save.

Adding Inactive Garnishment Orders

To add inactive orders:

1. Sign on to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Define Defaults, Upgrade EE Garnishment Orders.
3. Select the Upgrade Garn Spec tab.
4. Click the “+” button to insert a new row.
5. Enter values for the fields EmplID, Company, GarnishmentID, SetID, and VendorID from the inactive orders sections of the report for each order you want to update.
Enter values for the Location and Remit Address fields from the available prompt lists, selecting the correct value for each order you are updating.
6. Click Save.

There are several things to keep in mind when you are adding new data on this page:

- All manually inserted rows will initially have the value *O* in the Used field, marking them as online entry.
- The system will not prevent you from entering any combination of data on this page.

It does not check whether you are entering only inactive orders. It is your responsibility to decide what updates you are making and add corresponding data on this page.

- In the following pass, the Used field will get a different value, depending on whether it actually updated the real order or not.

The conversion program will update the value of this field to *U* when the orders are updated, which will happen if the Location and Remit Address fields have any values. The conversion program will update the value of this field to *X* when the orders are not updated, which will happen if the Location or Remit Address fields do not have any values.

- The Used field will be very important after running the final upgrade pass.

If there is any row in the data with the value *O* in the Used field, you will have to access the garnishment order and do manual updates where applicable, because there will be no more upgrade conversion after the last validation. Follow the above instructions on how to access the garnishment order and fix the data manually.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Payroll for North America	All	All

Task 5-14: Setting Up US Custom Garnishment Rules

This section discusses:

- Understanding US Custom Garnishment Rules Setup
- Creating US Custom Garnishment Rules
- Cloning US Custom Garnishment Rules

Understanding US Custom Garnishment Rules Setup

In this task you set up U.S. garnishment rules.

Note. Run this task only if you used to maintain any U.S. garnishment rules in prior releases, and you have decided that you will still need them after the upgrade.

In PeopleSoft 9, there are two ways to set up garnishment rules:

- Create the U.S. custom rules by entering the data in the online component.
- Clone one of the existing rules and save it as a new custom rule.

In an ideal situation, manual setup of custom rules should be done only during the Initial pass. However, it is possible due to timing of the upgrade passes, that you have added more custom rules since the last pass. You can compare the US Custom Garnishment Rules Audit report from the previous and the current pass to see whether any custom rules have been added since the previous pass. If there are some new rules, and you decide you need them in future, you can set them up during the Move To Production Pass, but this applies only to any new rules. The rules you have already set up in prior passes will be copied during the upgrade by running the export and import scripts for U.S. custom garnishment rules.

See Appendix: “Understanding Garnishments Changes.”

See “Prepare Your Database,” Running Application Audits, Running Upgrade Reports, Running US Custom Garnishment Rules Audit.

See Validating EE Garn Rule Data.

See “Apply Application Changes,” Completing Application Processes, Exporting US Custom Garnishment Rules and Importing US Custom Garnishment Rules.

See *PeopleSoft Enterprise Payroll for North America 9.0 PeopleBook*.

Task 5-14-1: Creating US Custom Garnishment Rules

In this step you create new garnishment rule by using the online component to enter the required data.

To create a U.S. custom garnishment rule:

1. Sign on to the Copy of Production database.
2. Select Set Up HRMS, Product Related, Payroll for North America, Garnishments, Rules Table.
3. Click Add a New Value.
4. Enter values in the Law Source and Rule ID fields for the rule that you want to create.
5. Click Add.
6. Enter all required data on each tab of the component.

You can use the U.S. Custom Garnishment Rule Audit report to find out what values you need to enter.

7. Click Save.
8. Repeat steps 3 through 7 for each U.S. garnishment rule that you need to set up.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Payroll for North America	All	All

Task 5-14-2: Cloning US Custom Garnishment Rules

In this step, you create a new garnishment rule by cloning an existing garnishment rule.

To clone any existing rule as new custom rule:

1. Sign on to the Copy of Production database.
2. Select Set Up HRMS, Product Related, Payroll for North America, Garnishments, Clone Rules.
3. Click Add a New Value.
4. Enter the run control ID *UPG_CLONE*.
5. Click Add.
6. Enter values in the Law Source, RuleID, and Effective Date fields for the rule you want to clone.
7. Enter values in the Law Source, Rule ID, and Effective Date fields for the new rule you want to create.
8. If you want to create more than one rule, insert a new row in the New Garnishment Rule group box.
9. Repeat steps 7 and 8 for each rule you want to create.
10. Click Run.

There are several things to keep in mind when cloning existing rules:

- You can repeat the cloning process many times, using different rules to create as many new rules as you want.
- The new rules will be exactly the same as the rule used for cloning, except for the values in the Source Law, Rule ID, and Effective Date fields, which you entered on the run control page of the cloning process.
- You should try to find the rule that has the same formula as you need in your new rule.

If there is no rule with the identical formula, you can find a rule with the most similar formula and use it for cloning.

- After the rules are cloned, you can access the Garnishment Rules Tables and modify any of the cloned values.

For example, you can update the formula steps by deleting old or adding new steps, or update exemption variables or any other field that you want to change.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Payroll for North America	All	All

Task 5-15: Validating EE Garn Rule Data

This section discusses:

- Understanding EE Garn Rule Data Validation
- Running the EE Garn Rule Data Validation Report
- Updating Garn Rule Data

Understanding EE Garn Rule Data Validation

In this task, you perform steps to review and update rule data on garnishment orders, if needed.

The purpose of this task is to find all orders that reference rules that do not exist in garnishment rules tables, because you might have some U.S. custom rules that you do not need. However, this task will not only check orders for U.S. custom rules, it will check orders for any rule that might not be defined in garnishment rules tables. We recommend that you run this task to check the validity of your data even if you do not have any U.S. custom rules.

See Appendix: “Understanding Garnishments Changes.”

See Setting Up US Custom Garnishment Rules.

See “Apply Application Changes,” Completing Application Processes, Exporting US Custom Garnishment Rules and Importing US Custom Garnishment Rules.

Task 5-15-1: Running the EE Garn Rule Data Validation Report

In this step, you run a report that lists garnishment orders whose rules do not exist in Garnishment Rules Tables.

To run the EE Garn Rule Data Validation Report:

1. Sign on to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Reports, EE Garn Rule Data Validation.
3. Click Add a New Value.

4. Enter the run control ID *UPG_GARN_RULE*.
5. Click Add.
6. On the EE Garn Rule Data page, click Run.
7. Analyze the data presented in the report to decide how you will correct the data.

The report has two different sections:

- Active orders with rules missing in Garnishments Rules Tables.
- Inactive orders with rules missing in Garnishments Rules Tables.

After reviewing the report, you can decide how to fix the data depending on what type of rule is missing.

If the rule is a U.S. custom garnishment rule, you have the following two options:

- You can create the missing rule in Garnishments Rules Tables by following the instructions in Setting Up US Custom Garnishment Rules.
- You can update garnishments orders and replace the missing rule with the existing rule by following the instructions in the step below.

If the rule is a Canadian custom garnishment rule, you have following two options:

- You can create the missing rule in Garnishments Rules Tables CAN, which must be done in the Copy of Production before the tables are renamed.

This way the Canadian custom rules will be copied during the conversion from renamed tables into a new structure of garnishments rules tables.

- You can update garnishments orders and replace the missing rule with the existing rule by following the instructions in the step below.

If there is any active order listed in the report, it is expected that you will fix the data using one of the above options. The active orders have the status Approved or Received. They will continue to be processed after the upgrade. If the rule is not defined in Garnishment Rules Tables, the pay calculation program will issue an error for the employee.

This report will insert all active orders listed in the report into a new record that will be accessible in the online component. The next step provides instructions for accessing the online component and making the updates. If you are planning to create the missing rule, simply ignore the entries created by the report.

If there is any inactive order listed in the report, it is up to you to decide whether you want to make any updates to history data or not. Because these orders do not have Approved or Received status, they will not be processed in following pay calculations, and leaving them as is will not have any impact on payroll calculations.

The inactive orders will not be automatically inserted and available in the online component. If you decide that you want to make updates to history data, you can access the online component and manually add the orders you want to update. The next step provides instructions for how to access the online component and add the history records. If you decide to create the missing rule, do not add any history rows into the online component.

This report will run in each upgrade pass, but it will only list the data that you need to review; for example, the initial pass listed 10 active orders, which you have reviewed and updated. The Move to Production passes will list additional orders only if you have created a new order between two passes that matches the report selection criteria; otherwise, it will be empty.

Note. If the final Move to Production pass lists any data in this report and you decide you need updates, you will do the updates directly in Create Garnishments, Garnishments Rules Tables, or Garnishments Rules Tables CAN in your production database before you go live.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Payroll for North America	All	All

Task 5-15-2: Updating Garn Rule Data

This section discusses:

- Understanding Updating Garn Rule Data
- Updating Active Garnishment Orders
- Updating Garnishment Orders After Final Move to Production Pass
- Adding Inactive Garnishment Orders

Understanding Updating Garn Rule Data

In this step, you update Garn Rule Data on active garnishment orders, if needed, or add inactive garnishment orders that have Garn Rule data that you want to update.

Updating Active Garnishment Orders

To update active orders:

1. Sign on to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Define Defaults, Upgrade EE Garnishment Orders.
3. Select the Upgrade Garn Rule tab.
4. Review the data and select values in the New Law Source and New Rule ID fields from the available prompt lists, selecting the correct value for each order you are updating.
5. Click Save.

There are several things to keep in mind when you are reviewing the data on this page:

- The orders are inserted here because they match certain criteria, but that does not mean you have to update the order and change the rule.

You can add the missing rule into Garnishment Rules Tables and ignore the entries listed in this page. If you do not provide new values for the law source and rule ID, the conversion will not make any updates in the next pass.

- You can only update the New Law Source and New Rule ID fields for the orders that are automatically inserted by the validation report onto this page.

You will get an error message if you are trying to update any other field in the row.

- You can delete the row in this page, but when you run the report the next time, the validation will find all orders that match the selection criteria and insert the same row again, if it is still applicable.

The same criteria will most likely still be applicable, unless you have created the rule in Garnishments Rules Tables between upgrade passes.

- The Used field on this page may have multiple values.

This field is display only because it keeps track of why data is inserted, whether data passed through conversion, and whether data updated the real garnishment order or not. Review translate values for this field to see details about each value. The rows created by the first section of the report will have the value *M* in the Used field.

- In the following pass, the Used field will have a different value, depending on whether it actually updated the real order or not.

The conversion program will update the value of this field to *U* when the orders are updated, which will happen if the New Law Source and New Rule ID fields have any values. The conversion program will update the value of this field to *X* when the orders are not updated, which will happen if the New Law Source and New Rule ID fields do not have any values.

- The Used field will be very important after running the final upgrade pass.

If there is any row in the data with the value *M* in the Used field, you will have to access the garnishment order and do manual updates where applicable, because there will be no more upgrade conversion after the last validation. These entries would be created by the last validation report and most likely would be for the garnishment orders that were newly created in the last Copy of Production since the last time you took the copy.

Updating Garnishment Orders After Final Move to Production Pass

To manually update garnishment orders after the final Move To Production pass:

1. Sign on to the Copy of Production database.
2. Select Payroll for North America, Employee Pay Data <country>, Deductions, Create Garnishments where <country> is, for example, CAN, USA, or USF.
3. Enter the employee ID and company that needs manual updates.
4. Click Search.
5. If there is more than one garnishment order for the same employee, select the row with the garnishment ID that needs to be manually updated.
6. Select the Garnishment Spec Data 6 tab.
7. If there is more than one assignment applicable to this garnishment, select the row with the rule that needs to be manually updated.
8. Update the following fields, as needed: Law Source, Rule ID.
9. Click Save.

Adding Inactive Garnishment Orders

To add inactive orders:

1. Sign on to the Copy of Production database.
2. Select Set Up HRMS, Upgrade, Define Defaults, Upgrade EE Garnishment Orders.
3. Select the Upgrade Garn Rule tab.
4. Click the “+” button to insert a new row.
5. Enter EmplID, Company, GarnishmentID, Law Source, and RuleID from the Inactive Orders section of the report for each order you want to update.

Enter values in the New Law Source and New Rule ID fields from the available prompt lists, selecting the correct value for each order you are updating.

6. Click Save.

There are several things to keep in mind when you are adding new data on this page:

- All manually inserted rows will initially have the value *O* in the Used field, marking them as online entry.
- The system will not prevent you from entering any combination of data on this page.

It does not check whether you are entering only inactive orders. It is your responsibility to decide what updates you are making and add corresponding data on this page.

- In the following pass, the Used field will have a different value, depending on whether it actually updated the real order or not.

The conversion program will update the value of this field to *U* when the orders are updated, which will happen if the New Law Source and New Rule ID fields have any values. The conversion program will update the value of this field to *X* when the orders are not updated, which will happen if the New Law Source or New Rule ID fields do not have any values.

- The Used field will be very important after running the final upgrade pass.

If there is any row in the data with the value *O* in the Used field, you will have to access the garnishment order and do manual updates where applicable, because there will be no more upgrade conversion after the last validation. Follow the above instructions on how to access the garnishment order and fix the data manually.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Both	Payroll for North America	All	All

Task 5-16: Reapplying Absence Management Direct Reports UI

In the new release, Absence Management uses the Direct Reports UI. Absence information was previously defined by selecting Set Up HRMS, Common Definitions, Direct Reports for Managers, Direct Reports Setup and modifying the following components:

- GP_ABS_SSMGR_BAL_L
- GP_ABS_SSMGR_HIS_L
- GP_SS_MGR_ABS_L

Now, you define this information in the Configure Direct Reports UI page by modifying the following components

- GP_ABS_MGRSS_BAL
- GP_ABS_MGRSS_HIST
- GP_ABS_MGRSS_REQ

To make changes to the delivered Direct Reports UI configuration:

1. Select Set Up HRMS, Common Definitions, Direct Reports for Managers, Configure Direct Reports UI.
2. Click the Configure button to modify any of the following components:
 - GP_ABS_MGRSS_BAL
 - GP_ABS_MGRSS_HIST
 - GP_ABS_MGRSS_REQ
3. Make the appropriate configuration changes.
4. Click Save.

Properties

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

Task 5-17: Updating the Employee ID Length

Following data conversion, you will need to review the EMPLID Field Length value in your new release before you use any transaction that creates new employee IDs. This field is used by the process that automatically generates new employee ID values. You should verify that the displayed value is equal to or greater than the length you have used for employee IDs in your previous release.

To review the EMPLID Field Length value:

1. Select Set Up HRMS, Install, Installation Table.
2. Select the Product Specific tab.

The screenshot displays the 'Product Specific' tab in the HRMS configuration interface. The interface is divided into several sections:

- Benefits Functions:** Includes checkboxes for FMLA Administration, COBRA Administration (checked), Benefits Billing, Retroactive Benefits/Deduction, and FSA Claims Administration (checked). A 'Start Date for BenAdmin' field is set to 01/01/1995.
- Benefits Deduction Class Order:** Includes radio buttons for 'EE After Tax Then PTax Benefit' (selected) and 'PTax Benefit Then EE After Tax'.
- Federal Functionality:** Includes a 'Default Pay Basis' dropdown set to 'Per Annum' and an 'NFC Indicator' checkbox.
- NA Payroll / Payroll Interface:** Includes checkboxes for Concurrent Calc./Confirm, Automatic Employee Tax Data (checked), Use State Residence for Local (checked), Change Final Check, Change Online Check, Change Reversal Adjustments, and Load in Preliminary Calc.
- T&L / NA Payroll Paysheet Opt:** Includes checkboxes for Change Final Check, Change Online Check, Change Reversal Adjustments, and Load in Preliminary Calc.
- AP Invoice Number Prefix:** Includes an 'AP Inv. Prefix' field set to 'P'.
- Commitment Accounting:** Includes a checked 'Encumbrance Trigger' checkbox.
- Human Resources:** Includes checkboxes for Multi-Company Organization (checked), Automatic Job Termination, and Automatic Job Suspension. A 'Temporary SSN' Mask field is set to 999. The 'EMPLID Field Length' is set to 4.
- General Ledger:** Includes a 'GL Version' field set to N/A and an 'Update Version' button.
- Combination Editing Caching:** Includes a 'Cache Validations' checkbox and a 'Cache Retention Days' field set to 0.

At the bottom of the interface, there are 'Save' and 'Notify' buttons, and a navigation bar with links to Products, HRMS Options, Product Specific (selected), Country Specific, Last ID Assigned, Third Party/System, and Alternate Character.

Product Specific tab

3. Update the EMPLID Field Length value, as needed
4. Click the Save button.

Note. You must restart the application server for any changed settings to take effect.

Properties

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

Task 5-18: Setting Up Student Group Security

User ID security for student groups is a new feature in PeopleSoft 9.0. It must be enabled in order to access student groups created prior to PeopleSoft 9.0.

For information on setting up student group security, see *PeopleSoft Enterprise Campus Community Fundamentals 9.0 PeopleBook*, “Setting Up Student Groups,” Setting Up a User ID’s Student Group Security.

Properties

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

Task 5-19: Reviewing PeopleTools Functionality

The PeopleSoft Enterprise PeopleBooks detail the current 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 PeopleSoft Customer Connection (Implement Optimize + Upgrade, Upgrade Guide, Upgrade Documentation and Software, Release Notes).

You should review the following considerations:

- If you applied a 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.

- PeopleTools 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 PeopleTools. PeopleTools system databases and PeopleSoft 8.4 applications use the classic style, whereas all other applications use the new dark blue style. After the PeopleTools portion of the upgrade, PeopleSoft 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.

- 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 PeopleTools releases. Check the necessary application patches that may be required in order 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 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 8.48 PeopleBook: PeopleSoft Integration Broker.

Properties

Database Orientation	Initial or MTP	Products	Platforms	Languages
Target	Initial	All	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: 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 5-22: 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:

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4. In the Service Pack field, enter the service pack number to which you are upgrading. For example, if you are upgrading to SP2, enter the number 2. If you are upgrading to a release that is not at a service pack level, enter 0.
5. Click Stamp.
6. Close Application Designer.

Properties

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

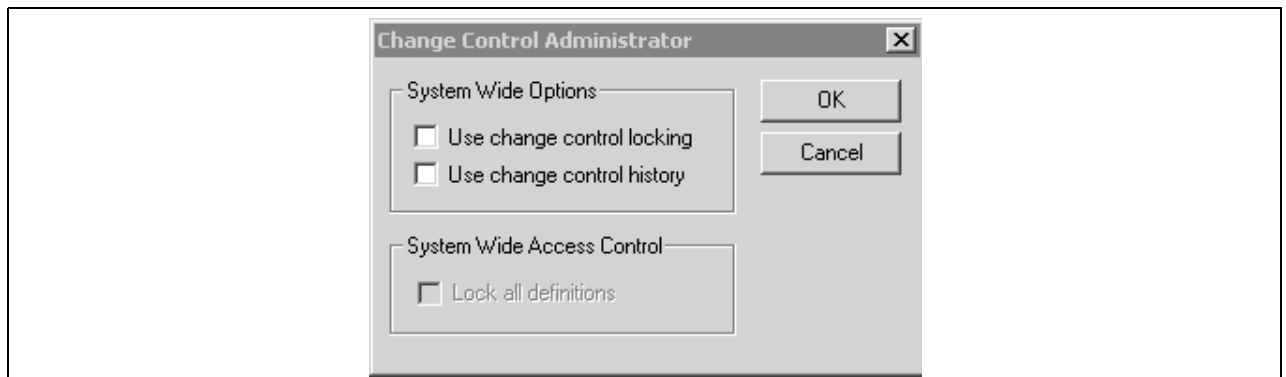
Task 5-23: Reviewing Change Control

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 5-24: 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 5-25: 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 information 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. Oracle 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.

Note. Because of interdependencies between products and product lines, you will need to download all fixes for all HRMS products and product lines, even if you are not licensed for them. If you do not need the program, the upgrade will detect it but you can introduce an error by not applying it. This includes HRMS Commercial, HRMS Education and Government, and HRMS Federal Government product lines, as well as all products within the product lines.

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

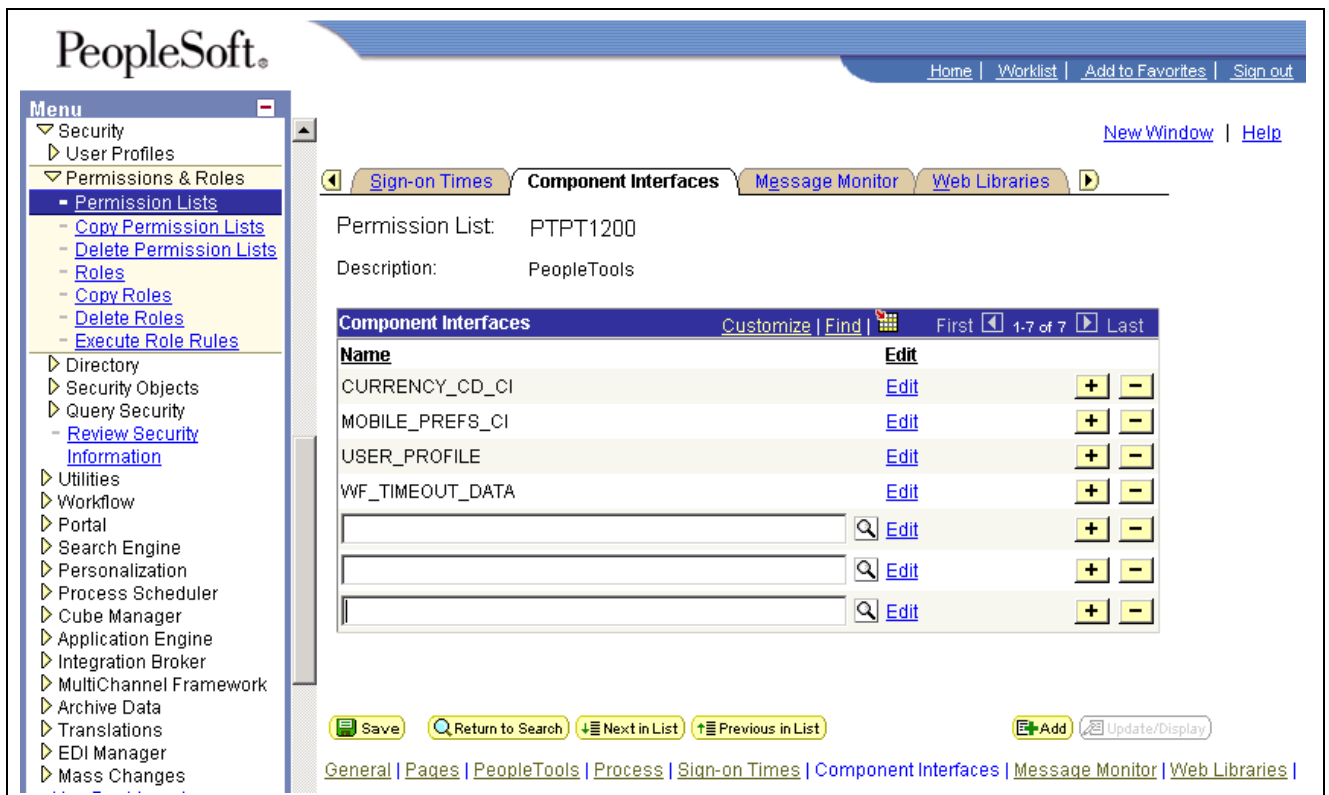
This appendix discusses:

- 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 screenshot shows the PeopleSoft user interface in a light blue style. The top navigation bar includes links for Home, Worklist, Add to Favorites, and Sign out. The left menu is expanded to show the 'Permissions & Roles' section, with 'Permission Lists' selected. The main content area displays the 'Component Interfaces' for the 'PTPT1200' permission list, which is described as 'PeopleTools'. The table lists several interfaces: CURRENCY_CD_CI, MOBILE_PREFS_CI, USER_PROFILE, and WF_TIMEOUT_DATA, each with an 'Edit' link and '+' and '-' buttons. The bottom of the screen shows a breadcrumb trail: General | Pages | PeopleTools | Process | Sign-on Times | Component Interfaces | Message Monitor | Web Libraries |

The light blue style user interface option

This example represents the dark blue style.

The screenshot shows the PeopleSoft user interface in a dark blue style. The layout is identical to the light blue version, but the color scheme is darker. The top navigation bar, left menu, and main content area all feature a dark blue background with white text. The breadcrumb trail at the bottom remains the same: General | Pages | PeopleTools | Process | Sign-on Times | Component Interfaces | Message Monitor | Web Libraries |

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:

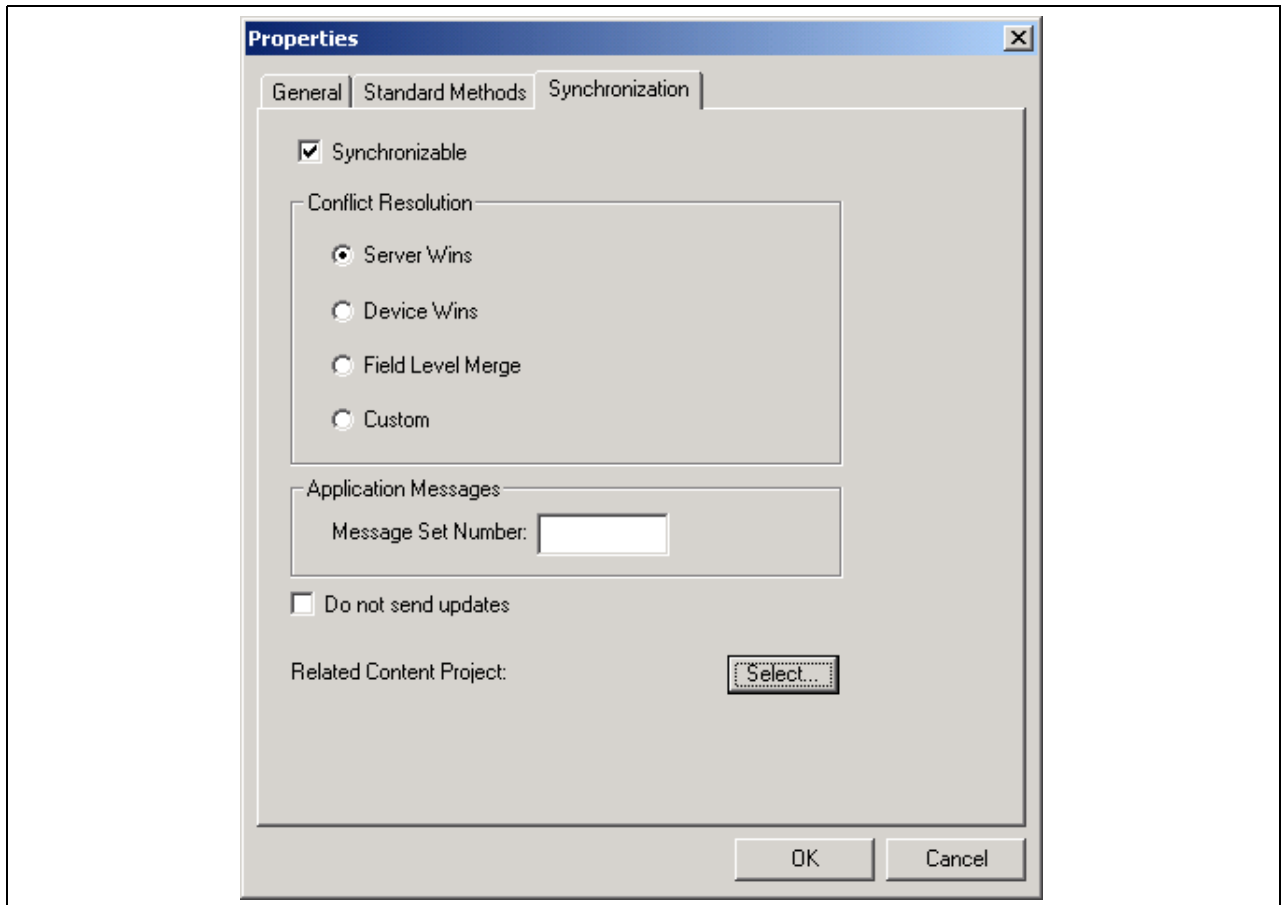
1. In Application Designer, open the stylesheet PSSTYLEDEF.
2. Select the PSALTERNATE Sub Style Sheet, and click Delete.
3. Select Insert, Insert Sub Style Sheet.
4. Select PSALTERNATE_LIGHTBLUE or PSALTERNATE_DARKBLUE.
5. Repeat steps 1 through 4 for the PTSTYLEDEF and PSACE Sub Style Sheets, making 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 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. PeopleSoft 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.



The 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 the appendix titled “Sizing Tables for the Upgrade” to determine how much space you will need. These recommendations are minimum levels; you should plan to use more.
- 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 (*PSYrecname*).
- 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 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 PeopleTools tables or objects including queries, trees, and tree structures. The freeze on PeopleTools changes is important because you will lose any changes to these objects made during an upgrade to 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, PeopleSoft 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. PeopleSoft 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. Using PeopleTools 8.4x, 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. Using PeopleTools 8.4x, 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. Using PeopleTools 8.4x, 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 PeopleTools tables to actually preserve the queries, trees, and tree structures. During your test Move to Production, you ran MVPRDEXP.DMS to export the 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 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

Reviewing Batch Program Changes

Reviewing Batch Program Changes

Some of the batch processes have been rewritten from the previous version. Some were converted to Application Engine, while others were rewritten and renamed. The following table lists the batch programs (COBOL and SQR) that have been changed. Use this list when you review your batch process customization. If you know you have customized a particular program on this list, review the new program to verify whether you still need that customization.

Program Name in Previous Release	New Release Program Environment	New Release Program Name
BEN101.SQR	Removed as obsolete, replaced by plan-type-specific model SQRs.	Replaced by BEN102.SQR, BEN103.SQR, BEN104.SQR, and BEN105.SQR.
BEN500.SQR	SQR Program re-delivered as an Application Engine.	BN_BEN500_AE
BEN100.SQR	Replaced by BEN100A.SQR and removed as obsolete.	Replaced by BEN100A.SQR and removed as obsolete.
BEN110.SQR	Split into two processes: BEN110 Application Engine "Snapshot Premium - Calculation" and BEN110.SQR "Snapshot Premium - Report."	Now invoked through Processing Job BEN110_J "Snapshot Premium - Reporting."
BEN702.SQR (Flat) BEN704.SQR (Age) BEN714.SQR (Service) BEN731.SQR (Salary)	Individual Rate Table reports were removed and consolidated into a new report.	Replaced by BEN741.SQR (Benefits Rate Table).

APPENDIX G

Reviewing Benefits Changes

This appendix discusses:

- Reviewing Effective Dating of Company Cars
- Reviewing Savings Management Enhancements
- Understanding Benefit Program Enhancement
- Reviewing Changes to Relationship Usage
- Reviewing Spending Account Changes
- Reviewing Consolidation of Benefit Rates
- Reviewing Consolidation of Coverage Calculations

Task G-1: Reviewing Effective Dating of Company Cars

Company car data is now effective dated with effective status. In previous PeopleSoft releases, you may have directly deleted the cars (CAR_DATA) from the table when they were no longer required to avoid incorrect allocation. In the new PeopleSoft release, you can make the cars active or inactive and maintain history.

Task G-2: Reviewing Savings Management Enhancements

Savings Extensions and Overrides has been renamed and redesigned to reflect its true Savings Management purpose. Limit types/Exception Reasons have been expanded to include Limit 401(a)/Adjust Eligible Earnings YTD which allows the user to adjust eligible earnings used in 401(a) limit processing. The second Limit type/Exception reason is the Hardship Withdrawal 402(g) limit reduction which was taken off of the 402(g) Catch up row. The corresponding Hardship Withdrawal Date, which regulates the Savings Plan suspension period after a hardship withdrawal, has been moved to a new Enrollment Suspension grid. Note that Exception Reason is more descriptive of how it affects the calculation; for example, Extend Limit, Reduce Limit, or Adjust Eligible Earnings YTD.

The upgrade is performed for all rows in Savings Management, PS_SAVINGS_MGT_EE, with Limit Type/Exception Reason 402(g) Catch-up and an existing Hardship Withdrawal Date. Review the new Limit Exception 402(g) Hardship, SAVINGS_MGT_EE, and Enrollment Suspension, ENROLL_EXCEPTN, rows generated from the Limit Exception 402(g) Catch-Up record, as described for upgrade.

Task G-3: Understanding Benefit Program Enhancement

Customers have asked for an “empty” Benefit Program, one with no Plans associated with it, for use in various administrative situations. For example, PeopleSoft Payroll for North America expects a payee to be assigned to a Benefit Program even if that individual is not being administered through Base Benefits. Assigning this person to an “empty” Program emphasizes the administrative nature of the assignment and prevents unintentional enrollments from being entered. To facilitate this, a new manual Benefit Program called PSX with an effective date of 1900-01-01 is being delivered as system data. (This is because the business validations performed by the Benefit Program Definition component prevent the user from directly creating such an “empty” program themselves.)

Task G-4: Reviewing Changes to Relationship Usage

This section discusses:

- Understanding Changes to Relationship Usage
- Reviewing Cobra Event Rules
- Reviewing Dependent Relationship Rules
- Reviewing HIPAA Changes

Task G-4-1: Understanding Changes to Relationship Usage

For consistency in the use of Relationship codes, we are consolidating any relationships codes in the Translate Table that currently reflect gender into a single genderless code. For example, *Son* and *Daughter* are being consolidated into *Child*, since in general gender is available as a separately tracked personal attribute. All tables that contain the field Relationship will undergo data conversion to reflect the non-gender translate values.

Task G-4-2: Reviewing Cobra Event Rules

Cobra Event Rules (CBR_EVENT_BENEF) is being modified to use Covered Person Type instead of Relationships, in order to streamline and standardize the functionality with the existing functionality in the Benefits Administration product. You should validate the content of this record after upgrading, since the conversion of duplicate genderless Relationship rows might have impacted your production data.

Task G-4-3: Reviewing Dependent Relationship Rules

The Dependents Relationship Table (DEPBEN_TYPE_TBL) is specifically upgraded to convert to genderless relationship codes. To eliminate duplicates, only the most current rows for any grouping of old gender-specific translate values was converted. Customized rows that do not conflict with the new PeopleSoft-maintained non-gender values are converted, but overlapping rows are deleted. You should validate the content of this record after upgrading.

Task G-4-4: Reviewing HIPAA Changes

The EDI mapping table (BN_834_MAP_TBL) is specifically upgraded to convert to genderless relationship codes. Customized rows that do not conflict with the new PeopleSoft-maintained non-gender values are converted, but overlapping rows are deleted. You should validate the content after upgrading.

Task G-5: Reviewing Spending Account Changes

This section discusses:

- Understanding Spending Account Setup
- Reviewing Changes to Spending Account Pledge Limits
- Reviewing FSA Claims Processing Setup

Task G-5-1: Understanding Spending Account Setup

A new field, Spending Account Type (BN_SPEND_ACCT_TYPE), has been added to the FSA Benefit Table. It is used to distinguish whether the Spending Account being created is a traditional Flexible Spending Account (which assumes claims management) or a newly supported Health Savings Account. The default value for this new field is *Flexible Spending Account*. During the Record-Alter step of applying the upgrade, all existing rows will receive this default value, since that is the only type of Spending Account that was previously supported. Further, for plan types 60, 61, 65, and 66, this attribute cannot be changed. This is because certain assumed functional and regional behaviors for these standard FSA plans are built into the code. For all other plan types, the Spending Account Type is open for assignment, although all benefit plans under a given plan type *must* have the same Spending Account Type. Note also that the system still has limitations about its ability to manage client-defined plan types within the 6X series.

A new field, Plan Contribution (PLAN_CONTRIBUTION), has also been added to the table. This concept is borrowed from Savings Plans and controls the requirements for employee contributions (Annual Pledge) when enrolled in a Spending Account. That is, once enrolled, this flag controls whether an employee contribution is required, is optional (perhaps because the employer is also contributing), or not allowed (as might be the case for a fully employer-paid HSA plan). To retain existing system behavior, the default for this field during the Record-Alter step is *Contribution Required*.

Task G-5-2: Reviewing Changes to Spending Account Pledge Limits

For Spending Accounts (6X plans) the Minimum and Maximum Employee Annual Contribution limits have been moved from the Benefit Program definition (from the Plan-level on PS_BEN_DEFN_PLAN) onto the Spending Account plan table (PS_FSA_BENEF_TBL). This provides better control over plan-specific limits. The data conversion performed on existing limit data is consequently a “best guess.” This is because the same 6X plan may appear in more than one Benefit Program, but with different plan-type-level limits. Thus, the existing limit definitions cannot be accurately mapped from their current plan-type level to the new individual benefit-plan level. The data conversion process will copy the lowest non-zero Minimum limit and the highest non-zero Maximum limit found for each Benefit Plan to the Spending Account Plan Table. As part of your implementation of this upgrade release, you need to review all of your existing 6X Spending Accounts and verify the limit information for them. Note that the default numeric value of 0 for either limit will be interpreted as unlimited (or limit not used). Note that in order to reduce the impact of this feature, the existing limit fields are not physically removed from the PS_BEN_DEFN_PLAN table, but rather simply hidden on all application pages, set to zero in the table, and ignored by all processing.

Task G-5-3: Reviewing FSA Claims Processing Setup

An FSA Admin Configuration tab has been added to the FSA Benefits Table setup to capture the information needed to properly implement the optional grace period, where overlapping periods exist for different calendar years and claims may be paid from either available remaining pledge. This information is only needed if FSA claims will be processed using the FSA Administration product.

Two new date fields, Service Date From and Through, are used to determine the service dates that are valid for claims submitted. The following online restrictions apply:

- Claims must have a service date within the service date range to be paid under the plan.
- The beginning service date will default to the effective date of the plan; for example, 1/1/2006.
- The end service date will default to 12 months after the effective date of the plan; for example, 12/31/2006.
- The end service date must be greater than or equal to the beginning date.
- The service date range may be longer than 12 months and may overlap with service dates of other benefit plans that the employer offers in which the employee is enrolled.

A new Plan Year field has been added, in order to properly close only the relevant plans. All plans will need to be identified with a Plan Year value. This field has a prompt from which valid years, such as 2005 or 2006, can be selected. This value is used to group plans for use in the FSA Closure process. A new field is added to the FSA Closure run control, from which the plan year is selected. Only those plans with a matching Plan Year Name value will be displayed and then can be selected for closure.

The minimum check amount for FSA plans, which was previously determined at the benefit program level, has been moved to the benefit plan level. This allows FSA plans within one benefit program to have different minimum check amounts. It is used to determine the minimum check amount when generating payments for the plan in the same manner as before.

The upgrade process will populate the new fields as follows:

- Service dates from and through will default to the beginning and the end of the current year when the upgrade is run for all combinations of FSA plan types and benefit plans where the effective date is before the current date. In cases where future effective dates exist, a 12-month period will be assigned using the effective date as the starting service date.
- The plan year will be the current year, or the year of the future effective date, depending on the case.

Be aware that the stated assumptions might not coincide with your implemented functionality, and values will need to be reviewed after conversion by selecting Set Up HRMS, Product Related, Base Benefits, Plan Attributes, FSA Benefits Table. Also, since each effective dated row covers only a specific service period, you will need to introduce a new effective dated row for each plan type and benefit plan each year going forward in the FSA Benefits table. This is only required if FSA claims will be processed using the FSA Administration product.

Task G-6: Reviewing Consolidation of Benefit Rates

In this release, we are consolidating all benefit rate data into a single common structure. The individual Age-Graded, Flat, Salary-Percent and Service tables will be dropped, and all rate data migrated to the new Benefit Rate Table. This table has a flexible architecture that can support all rate types, and will allow for the definition of user-defined rate types as well. The data conversion process has several points that require review:

- Rate Table IDs: Because the current benefit rates exist in several individual tables, the possibility exists that the Rate Table IDs defined on those tables could conflict (be duplicates) when consolidated. To manage this, each Rate Table ID will be checked as it is converted, and if a conflict is detected, the Rate Table ID will be modified to make it unique. Appending a Rate Type code to the end of the Rate Table ID does this. In prior releases, the Rate Type field was controlled by a set of Translate Table values. The existing values are Age-Graded (rate type=1), Flat (rate type=2), Salary-Percentage (rate type=3), and Service (rate type=4). So as an example, if a Service-rate Rate Table ID “ABC” was found to conflict with an ID that had already been converted, it would be renamed as “ABC-4”. All references to the old

Rate Table ID in Benefit Program definitions will be updated. You can review the set of Rate Table IDs that experienced conflicts by using the search criteria “%-” in the new Benefit Rate Table component (Navigation: Set Up HRMS, Product Related, Base Benefits, Rates and Rules, Benefit Rates.)

- **Zero-base on Numeric Ranges:** The Age-Graded table and the Service table both contain ranges used to determine the correct rate. In prior releases, the system allowed two situations that make interpretation difficult. First, some Rate Tables do not have a lowest range defined. For example, the first entry may be 5 to 15. Thus the range 0 to 4 is not managed. (Fortunately, the system would default to a zero rate for values in these undefined ranges.) During data conversion, the system will insert an “anchor” value of zero for all ranges and set the associated rates to \$0.00. Without a specific lower functional limit, the new benefit rate architecture will return an error if a value falls outside the defined table ranges. Secondly (and more commonly), the first range in the rate table may start with 1 rather than 0. For example, the first age range might be 1-20, which technically omits newborns. (Again, the system previously would default to a zero rate for ages below 1). During data conversion, the system will detect that a range starts at 1 and automatically set it to start at zero instead. Since most values (age and service) can functionally be zero in some situations, the new benefit rate architecture will return an error if a value falls outside the defined table ranges. You may want to review your converted Age-Graded and Service rates to confirm that these actions have been made appropriately. (Navigation: Set Up HRMS, Product Related, Base Benefits, Rates and Rules, Benefit Rates.)
- **Currency Code:** Benefit Program definitions currently display a Currency Code as an informational item. However, neither PeopleSoft Benefits nor PeopleSoft Payroll for North America perform any type of currency conversion. In previous releases, benefit rates did not include a currency code. Thus, the burden was on the user when setting up a Benefit Program to only use rates that matched the Program’s currency; the system was unaware of any currency mixing. For HCM 9, the Benefit Rate Table now includes a Currency Code as an informational item (except for Percent-of-Salary rates, which have no implied currency). When setting up a Benefit Program, the system will validate that a Rate’s currency matches the Program’s currency to reduce setup errors. During data conversion (benefit rate consolidation), the system will attempt to assign an appropriate currency code to each Rate Table ID, based on its usage in Benefit Programs. There are two considerations here that should be reviewed: Rates may be defined that have never been used in a Benefit Program, or Rates may exist that have been used in several different Benefit Programs whose currency codes are not consistent. In the first instance, the converted Benefit Rate will have a blank Currency Code. This will not affect its use (the system will treat that as a “wildcard” and allow it to be used with any Program currency) but it should be corrected as soon as possible for the sake of simple data integrity. In the second instance, during data conversion the system will simply assign the currency code found on the alphabetically lowest Benefit Program using that Rate Table ID. This should be reviewed for correctness. (Select Set Up HRMS, Product Related, Base Benefits, Rates and Rules, Benefit Rates.)

Task G-7: Reviewing Consolidation of Coverage Calculations

In prior releases, elements of *coverage* existed not only on the Benefit Plan attribute tables, the Life ADD Table and the Disability Plan Table, but also on the Calculation Rule Table. The Life ADD Table contained the coverage formula components (Factor X Salary + Flat Amount), the Disability Plan Table contained the Maximum Monthly Benefit and an implicit formula of Salary / 12, and the Calculation Rules Table contained the Coverage and Premium As-Of date rules, the Benefit Base to use, Multiple-job combination rules, Rounding rules, and Coverage Minimum/Maximum. For this release, we consolidated these components into a “Coverage Formula.”

During data conversion, the system analyzes the usage of Life and Disability benefit plans and Calculation Rule IDs in Benefit Programs. Based on the combinations found, the system creates new Coverage Formulas to duplicate the coverage calculations performed in previous releases. The number of combinations could be quite large, and many of them could be unintentional (or even duplicates) since the Benefit Program allows complete flexibility in associating calculation rules with benefit plans, and since multiple benefit plans may exist with the same attributes but from different vendors or with different descriptions. To reduce the number of formulas created, and to avoid perpetuating unintentional variations, we restrict the data conversion; for each distinct set of Life or Disability attributes, we combine the set with only the single alphabetically lowest Calculation Rule ID with which it is associated. We then create a *model* Coverage Formula based on that combination, and update all relevant Life and Disability plans to reference the new Coverage Formula ID. In doing this, we assume that the same Life or Disability plan is not being used with a wide variety of calculation rules (different rounding rules, different Minimum/maximum, etc.), in order to avoid creating a large number of Coverage Formulas. The concept of the reusable Coverage Formula is significant enough to warrant performing only this *model* conversion, and requires a small re-implementation of your Life and Disability plans. This should be as simple as reviewing the data conversion results and confirming the actual coverage calculations in test deduction calculation runs. (Navigation: Set Up HRMS, Product Related, Base Benefits, Rates and Rules, Coverage Formula.)

To facilitate the use of the automatically converted Coverage Formulas, we have implemented a naming convention for Coverage Formula IDs that is representative of the formula's content, 99|X|X|999X|X|X|, which is described in the following table.

Byte Position	Format	Content
1-2	99	Salary factor rounded to an integer for Life, DS for Disability
3	X	The Benefit Base used, coded as Job Compensation Rate (C) or Annual Benefits Base Rate (A).
4	X	Indication of whether the Base combines across multiple jobs, coded as Multiple (M) or Single (S).
5-8	999X	The Flat Amount for Life, if any, added to the coverage calculation, or Maximum Monthly Benefit for Disability, in a form of 500, 250K, or 1.5M, as appropriate.
9	X	The Coverage Base As-Of date rule, coded as Check Date (C), Pay End Date (P), Last Year On MM/DD (L), This Year On MM/DD (T)
10	X	A letter used to identify, in sequence, otherwise identical formulas (A, B, C, D, ...)

For example, Coverage Formula ID “02CS050KCA” would represent a Life coverage formula of “2 x Salary + 50,000,” where the *Salary* is the Compensation Rate from the primary Job (not combined for multiple jobs) as determined on the Check Date. The final *A* indicates that this is the first such formula created. Note that the Rounding rules, if any, are not represented in the Coverage Formula ID string, for lack of space.

APPENDIX H

Reviewing HRMS Changes

This appendix discusses:

- Reviewing Record and Field Conversions
- Reviewing Records with Duplicate Key Structures
- Reviewing the National ID Expiration Record

Task H-1: Reviewing Record and Field Conversions

This section discusses:

- Understanding Record and Field Conversions
- Status Conversions
- Reviewing Profile Management Table Deletions

Understanding Record and Field Conversions

This section discusses a number of columns in your database that will be converted during the upgrade but will need some functional analysis performed prior to running the data conversion scripts. Review the items below to determine if you want to modify the delivered scripts prior to running them.

Task H-1-1: Status Conversions

In the new release, the status indicators for six Recruit Workforce Records are changed from Translate Values to system-defined status codes. The following record.fields are converted:

- JOB_REQUISITION.JOB_REQ_STATUS
- APPLICATN_DATA.APP_STATUS
- POSN_APPLIEDFOR.APP_STATUS
- OFFER.RESPONSE_OFFER
- APPLICATN_ROUTE.RESPONSE_CD
- INTERVIEW.RECOMMENDATION

Task H-1-2: Reviewing Profile Management Table Deletions

During the upgrade to Profile Management, there is data that will not be upgraded and thus will be not be in the new release. There is no action for you to take, as this data cannot fit into the new Profile Management model. Some of these tables contain related language data. The following tables are affected:

- CM_EVALUAT_LNG
- CM_ELEM_DTL_LNG
- ACCOMPLISH_LANG
- SCHL_EDUC_LANG

Task H-2: Reviewing Records with Duplicate Key Structures

In PeopleSoft 7.5, the records listed below had keys that were defined as duplicate keys. In PeopleSoft 8.3, the duplicate key structure was removed from these records. Where a PeopleSoft 7.5 record has duplicate keys, the data conversion will eliminate all but the first row that it retrieves. If you want to preserve this data, you may run the following SQL, which will return all rows where the duplicate key condition is met. These SQLs need to be run on your current (old) database before the PeopleTools conversion takes place.

- INTERVIEW

```
SELECT *
FROM PS_INTERVIEW B
WHERE EXISTS (SELECT 'X' FROM PS_INTERVIEW B2
WHERE B.EMPLID = B2.EMPLID
AND B.JOB_REQUISITION# = B2.JOB_REQUISITION#
AND B.POSITION_NBR = B2.POSITION_NBR
AND B.SETID = B2.SETID
AND B.JOBCODE = B2.JOBCODE
AND B.INTERVW_DT = B2.INTERVW_DT
AND B2.FINAL_RECOMMENDATN = 'Y'
GROUP BY B2.EMPLID, B2.JOB_REQUISITION#, B2.POSITION_NBR, B2.SETID, B2.JOBCODE
HAVING COUNT (*)>1)
```

- APPLICATN_ROUTE

```
SELECT*
FROM PS_APPLICATN_ROUTE B
WHERE EXISTS (SELECT 'X' FROM PS_APPLICATN_ROUTE B2
WHERE B.EMPLID = B2.EMPLID
AND B.JOB_REQUISITION# = B2.JOB_REQUISITION#
AND B.POSITION_NBR = B2.POSITION_NBR
AND B.SETID = B2.SETID
AND B.JOBCODE = B2.JOBCODE
AND B.ROUTE_DT = B2.ROUTE_DT
AND B.ROUTE_TO_ID = B2.ROUTE_TO_ID
GROUP BY B2.EMPLID, B2.JOB_REQUISITION#, B2.POSITION_NBR, B2.SETID, B2.JOBCODE,
B2.ROUTE_DT, B2.ROUTE_TO_ID)
```


- OFFER

```
SELECT *
FROM PS_OFFER B
WHERE EXISTS (SELECT 'X' FROM PS_OFFER B2
WHERE B.EMPLID = B2.EMPLID
AND B.JOB_REQUISITION# = B2.JOB_REQUISITION#
AND B.POSITION_NBR = B2.POSITION_NBR
AND B.SETID = B2.SETID
AND B.JOBCODE = B2.JOBCODE
```

Task H-3: Reviewing the National ID Expiration Record

In the new PeopleSoft release, the National ID expiration record, PERS_NID_EXP used to store Canadian expiration dates, now only contains data for National ID rows that have an expiration date. If an expiration date does not exist, a row will not be stored in this record as it was in previous releases. If you have customized views or reports that rely on a one-to-one relationship between a Canadian National ID row in PERS_NID and PERS_NID_EXP this change will affect you.

APPENDIX I

Reviewing Tablespaces

This appendix discusses:

- Understanding Tablespace Review
- Reviewing PeopleSoft 8.9 MP1 Table Names

Understanding Tablespace Review

This appendix lists the tables that previously existed in 4K page size tablespaces that now reside in 32K page size tablespaces in the new release.

Task I-1: Reviewing PeopleSoft 8.9 MP1 Table Names

Review the following PeopleSoft 8.9 MP1 tables:

- HR_SSTEXT_TEXT
- EP_APPR_ITEM
- EP_AP_ITM_TMP
- EP_CHK_SUG_LANG
- EP_CHK_SUG_TBL
- GPIT_EFT_ATTACH
- UPG_APPL_RES

APPENDIX J

Reviewing Time and Labor Integration with Absence

This appendix discusses:

- Understanding Time and Labor Integration with Absence
- Reviewing Online Changes
- Reviewing Batch Changes
- Reviewing Absence Changes for PNA Employees

Understanding Time and Labor Integration with Absence

In release 9.0, the integration of Time and Labor with Absence Management has been modified. The impact of these changes is reflected in the Timesheet, Launch Pad, Time Administration processing, and the manager's Calendar Views and Manage Schedule pages.

Prior to release 9.0, once the Absence Event was reported in the Absence Management application, it was written to GP_ABS_EVENT_WRK (a “work” record). Then, another Application Engine was triggered to bring that Absence information into Time and Labor, which was stored in TL_RPTD_TIME table (Absence rows in TL_RPTD_TIME table had RT_SOURCE = ‘AM’). In release 9.0, the Absence data is visible within Time and Labor in a more real-time display. To achieve this, Time and Labor takes the Absence data directly from the Absence Event Table and displays the Absence information.

See *PeopleSoft Enterprise Time and Labor 9.0 PeopleBook*.

Task J-1: Reviewing Online Changes

The following online changes have been made to integrate Time and Labor with Absence.

- The Application Engine program TLAGGUPDATE is no longer used.
- Once an absence is reported, it is no longer stored in the intermediate “work” table.
- All the existing Absence data will be deleted from the TL_RPTD_TIME table.

The upgrade process will delete the data from the TL_RPTD_TIME table where RT_SOURCE = ‘AM’. If you want to create a backup of the rows that will be deleted, you can use the following SQL to export the data:

```
EXPORT FROM TL_RPTD_TIME WHERE RT_SOURCE = 'AM' ;
```

Note. This SQL should be run using the database query tool. There are no online pages in the new release that will give you access to this data.

- All the Absence data (RT_SOURCE = 'AM') from the Audit tables will be deleted.
- Data from the TL_RULES_OVRD table is not deleted.

You need to review the “AM” data and take appropriate action with the Absence data.

- The display of Absence data in 9.0 depends on the configuration option for the Take code reported with absences.

Take codes in Absence are defined at the country level. Therefore the configuration for one Country-Take code could be different from another Country-Take code. To resolve the absences for an employee, first determine the employee's country and then get the Take code configuration for that country to determine whether the absence reported for off days and holidays are to be considered as an absence or not.

- For Absence data to be displayed in Time and Labor, these requirements must be met:
 - An employee must be enrolled in Time and Labor.
 - The Take code must be mapped to the TRC (with the Absence option selected on the TRC definition).
 - Absence hours must be greater than zero.
 - If an absence is reported for an off day or holiday, the Take code must be configured to include the absence.
- In release 9.0, you can also report Absence data on the Timesheet page.

See *PeopleSoft Enterprise Time and Labor 9.0 PeopleBook*.

Task J-2: Reviewing Batch Changes

Because absences are no longer stored in TL_RPTD_TIME, the batch processes of TL_MASS_TIME and TL_TIMEADMIN will derive the Absence data from the GP_ABS_EVENT record and calculate their respective values accordingly. Please refer to 9.0 PeopleBooks for more details on the batch processing flow changes.

In release 9.0, the translate value *C – Changed* for the field EXCEPTION_STATUS has been deleted. This impacts the record TL_EXCEPTION. The upgrade process will update all values of *C* to *U – Unresolved* for the record TL_EXCEPTION.

Task J-3: Reviewing Absence Changes for PNA Employees

In release 8.9, Absence sent data to Time and Labor using a Component Interface. This data was inserted into Reported Time (TL_RPTD_TIME). There may be cases in which the Absence data has not yet been processed and still remains in Reported Time. Therefore, before processing the upgrade step to update RT_SOURCE in TL_PAYABLE_TIME (UPG_TL89.HCTLT01), you should run the Time Administration process to generate Payable Time for Absence data from the Reported Time. If you do not run the Time Administration process, the Absence data from the Reported Time will be deleted from section UPG_TL89.HCTLT03 and there is no other way to generate Absence data in Payable Time from Time and Labor. An SQR report (PUTLK01) will be provided which lists all Absence data that is in Reported Time and has not yet been generated as Payable Time. This will help you identify which employees to enter in the Time Administration process.

There may be exceptions generated from the Time Administration process that prevent the Absence reported time to be created in Payable Time. In this case, you need to address these exceptions before continuing with the upgrade process. If you do not want to address the exceptions, you can select the Continue with Exceptions check box from the Time and Labor Installation page before running the Time Administration process.

After running the Time Administration process, it is recommended that you run the SQR report again to see if there is still Absence time that has not yet been generated as Payable Time. If the report still shows any rows, you need to either fix or skip the exceptions, rerun the Time Administration process, and then check the report again. You should repeat this process until there are no more rows listed on the report.

APPENDIX K

Sizing Tables for the Upgrade

This appendix discusses:

- Sizing Tables

Task K-1: Sizing Tables

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. The following lists these new tables with information about how to size them relative to the size of your existing data. This information is meant to give you a rough estimate on an initial size so you can execute the conversion programs without errors.

Product Code	Table Populated During Upgrade	Estimate of Number of Rows of Data Inserted
BN	PS_BN_FORM_DEF	Approximately 1-10 rows for each parent PS_BN_FORMULA row.
BN	PS_BN_FORMULA	Approximately the same number of rows as PS_LIFE_ADD_TBL and PS_DISBLTY_PLN_TBL combined.
BN	PS_BN_RATE_DATA	Approximately the same number of rows as PS_FLAT_RATE_TBL, PS_SALARY_RATE_TBL, PS_SVC_COVG_TBL, and 2 x PS_AGE_COVG_TBL (for Smoker vs Non-smoker) combined.
BN	PS_BN_RATE_TBL	Will have the same number of rows as PS_AGE_RATE_TBL, PS_FLAT_RATE_TBL, PS_SALARY_RATE_TBL, and PS_SVC_RATE_TBL combined.
BN	PS_BN_RATE_TBL_LNG	For each row in parent PS_BN_RATE_TBL, will have one row for each non-base language supported by the client.

Product Code	Table Populated During Upgrade	Estimate of Number of Rows of Data Inserted
BN	PS_ENROLL_EXCEPTN	Rows with withdrawal dates from PS_SAVINGS_MGT_EE.
PY	PS_GARN_EXEMPT_TBL	This is not a new table. However, upgrade processes will insert many additional rows during data conversion. It will contain a summary of rows for U.S. and Canadian garnishment rules maintained by PeopleSoft (defined as system data in PeopleSoft 9), plus all custom rows for U.S. and/or Canadian garnishment rules that have been added in the prior release.
PY	PS_GARN_OPERANDS	This is not a new table. However, upgrade processes will insert many additional rows during data conversion. It will contain a summary of rows for U.S. and Canadian garnishment rules maintained by PeopleSoft (defined as system data in PeopleSoft 9), plus all custom rows for Canadian garnishment rules defined in the Copy of Production, plus 6 rows on average for each custom U.S. garnishment rule from the Copy of Production database.
GP ES	PS_GPES_CNTRB_RSLT	The same number of rows as the following: PS_GP_RSLT_ACUM WHERE PIN_NUM = (SELECT PIN_NUM FROM PS_GP_PIN WHERE PIN_CODE = 'SS ACBSECCNRMSESP') AND (A.EMPL_RCD = A.EMPL_RCD_ACUM OR ACM_TYPE = 'N')
GP ES	PS_GPES_TAX2_RSLT	Same number of rows as in the GP accumulator results table for the element TAX AC DIN S
GP MX	PS_GPMX_INT_PARM	One row per company per year.
GP MX	PS_GPMX_INT_PAYEE	One row per payee.
GP MX	PS_GPMX_INT_P_DTL	Twenty-five rows per company per year.

Product Code	Table Populated During Upgrade	Estimate of Number of Rows of Data Inserted
PM	PS_JPM_CAT_GMEMB	The same number of rows as PS_COMPETENCY_TYPS.
PM	PS_JPM_CAT_GROUPS	The same number of rows as PS_CM_TYPE_TBL.
PM	PS_JPM_CAT_GRP_LNG	The same number of rows as PS_CM_TYPE_LANG.
PM	PS_JPM_CAT_IRD_LNG	The sum of the number of rows in the following: PS_CM_RATDESCR_LNG, PS_EP_SUBPROF_LANG
PM	PS_JPM_CAT_I_RLAT	Two times the sum of the number of rows in the following: PS_CM_ELM_CRITERIA, PS_COMPETENCY_ELEM, PS_EP_SUB_COMP_TBL, PS_NVQ_UNITS_REQ
PM	PS_JPM_CAT_ITEM_RD	The sum of the number of rows in the following: PS_CM_RATING_DESCR, PS_EP_SUB_PROF_TBL
PM	PS_JPM_CAT_ITEMS	The sum of the number of rows in the following: PS_ACCOMP_TBL, PS_CM_CRITERIA_TBL, PS_CM_ELEMENT_TBL, PS_COMPETENCY_TBL, PS_EDLVL_ACHV_TBL, PS_EP_GOAL_TBL, PS_EP_INIT_TBL, PS_EP_MISSION_TBL, PS_EP_RESP_TBL, PS_EP_SUB_COMP_TBL, PS_EP_SUBCOMP_TBL

Product Code	Table Populated During Upgrade	Estimate of Number of Rows of Data Inserted
PM	PS_JPM_CAT_ITM_LNG	<p>The sum of the number of rows in the following:</p> <p>PS_ACCOMP_TBL_LANG, PS_CM_CRITERIA_LNG, PS_CM_ELEMENT_LNG, PS_COMPETENCY_LANG, PS_EDLVL_ACHV_LNG, PS_EP_GOAL_LANG, PS_EP_INIT_LANG, PS_EP_MISSION_LANG, PS_EP_RESP_LANG, PS_EP_SUBCOMP_LANG</p>
PM	PS_JPM_JP_ITEMS	<p>The sum of the number of rows in the following:</p> <p>PS_ACCOMPLISHMENTS, PS_CM_CLUSTER_ACOMP, PS_CM_ROLE_ACCOMPS, PS_CM_ROLE_COMPS, PS_COMPETENCIES, PS_EDUC_AREA_STUDY, PS_EG_SPECIAL_PRJ, PS_JOB_PROF_COMP, PS_JOB_PROF_QUAL, PS_JOB_PROF_RESP, PS_JOB_PROF_SUB, PS_SCHOOL_EDUCAT, PS_SPECL_PROJECT, PS_CM_ELEMENT_DTL</p>
PM	PS_JPM_JP_SYND_SRC	<p>The number of rows will be the same as the number of cluster profiles syndicated to role profiles.</p>

Product Code	Table Populated During Upgrade	Estimate of Number of Rows of Data Inserted
PM	PS_JPM_JP_X_RLAT	<p>The sum of the number of rows in the following:</p> <ol style="list-style-type: none"> 1) PS_JOB_PROF_REVW 2) PS_CM_ROLE 3) PS_POSITION_DATA where JOB_PROFILE_ID <> '' 4) PS_JOB_FAMILY_TBL where JOB_PROFILE_ID <> '' 5) PS_JOBCODE_TBL where JOB_PROFILE_ID <> '' 6) PS_SAL_GRADE_TBL where JOB_PROFILE_ID <> '' 7) DISTINCT EMPLID ACROSS: PS_SCHL_EDUC_LANG, PS_EDUC_AREA_STUDY, PS_EG_SPECIAL_PRJ, PS_ACCOMPLISHMENTS, PS_SCHOOL_EDUCAT, PS_CM_EVALUATIONS, PS_SPECL_PROJECT
PM	PS_JPM_PROFILE	<p>The sum of:</p> <ol style="list-style-type: none"> 1) DISTINCT JOB_PROFILE_ID FROM PS_JOB_PROFILE_TBL 2) PS_CM_CLUSTER_TBL 3) PS_CM_ROLE 4) DISTINCT EMPLID ACROSS: PS_SCHL_EDUC_LANG, PS_EDUC_AREA_STUDY, PS_EG_SPECIAL_PRJ, PS_ACCOMPLISHMENTS, PS_SCHOOL_EDUCAT, PS_CM_EVALUATIONS, PS_SPECL_PROJECT
PM	PS_JPM_PROFILE_LNG	<p>The sum of:</p> <ol style="list-style-type: none"> 1) DISTINCT JOB_PROFILE_ID, LANGUAGE_CD FROM PS_JOB_PROF_LANG 2) PS_CM_CLUSTER_LANG 3) PS_CM_TYPE_LANG

Product Code	Table Populated During Upgrade	Estimate of Number of Rows of Data Inserted
HC	PS_MU_CHANGE_TBL	The latest results from PS_MU_MASSUPD_RSLT using max (LASTUPDDTTM).
HC	PS_MU_SETUP_CHG	Maximum number of rows will be PS_MU_LEVEL01_DATA + (PS_MU_COMP_DATA x 11).
HC	PS_MU_SETUP_DTL	The same number of rows in row from PS_MU_MASS_UPD_TBL.
HC	PS_MU_SETUP_LNG	The same number of rows in PS_MU_MASS_UPD_LNG.
HC	PS_MU_SETUP_POP	The same number of rows in PS_MU_MASS_UPD_TBL.
HC	PS_MU_SETUP_TBL	The same number of rows in PS_MU_MASS_UPD_TBL.
HC	PS_MU_TP_TRANS_LNG	The number of latest rows based on LASTUPDDTTM from the join of PS_MU_MASSUPD_RLNG, PS_RUNCTL_MASSUPD1, and PS_MU_MASSUPD_RSLT.
HC	PS_MU_TP_TRANS_LOG	The number of latest rows based on LASTUPDDTTM from the join of PS_MU_MASSUPD_RSLT, PS_RUNCTL_MASSUPD1, and PS_MU_MASSUPD_RSLT.
HC	PS_MU_TP_TRANS_TBL	The latest results from PS_MU_MASSUPD_RSLT using max (LASTUPDDTTM).
GPES	PS_UPG_TXRSLT_GPES	The same as number of rows as in PS_GPES_TAX_RSLT.

APPENDIX L

Understanding Garnishments Changes

This appendix discusses:

- Understanding Garnishments Upgrade
- Understanding Payee Changes
- Understanding Rules Changes

Understanding Garnishments Upgrade

In PeopleSoft 9, we enhanced Garnishments functionality, which impacted the following areas:

- Garnishment Payee Data
- Garnishment Rule Data

We added the Location field to the payee data we store on the garnishment order to enhance processes that create invoices for paid orders. You will notice this change when you are creating new garnishment orders, whether you are using U.S. Payroll or Canadian Payroll. However, the upgrade related to this change is mandatory only if you are using our AP Interface functionality to create invoices.

We made several changes in the way we store U.S. garnishments rules, which you will notice if you are using U.S. Payroll or Federal Payroll to set up or review garnishments rules. There is no change in the way that we store Canadian garnishments rules. However, due to the fact that garnishments rules tables store data for U.S. and Canadian rules, and may store rules maintained by you in addition to the rules we deliver, even if you only use Canadian Payroll, your garnishments data will be processed by some upgrade tasks. This was the only way for us to deliver a generic upgrade that will work for any combination of data a user might have.

Task L-1: Understanding Payee Changes

This section discusses:

- Understanding Changes to Payee Data
- Updating Payee Data During the Initial Pass
- Updating Payee Data During Move to Production

Understanding Changes to Payee Data

If you are using AP Interface to create an invoice for the payee, you have to store payee data in the garnishment order. The payee data must exist in the Payee Table in order to be entered into the garnishment order. When you enter the payee data, the payee's address details will be added to the garnishment order, but it will not be used in any further processing. When the invoice and the voucher are created, the data sent to Accounts Payable does not contain the details about the payee's address; instead, it only has key information from the Payee Table that will allow AP processes to find the details on their side. This processing is based on the assumption that the Payee Table is synchronized on both sides, and it was designed in such way to avoid sending unnecessary information.

In PeopleSoft 9, we have added the Location field to the garnishment order (GARN_SPEC record) to ensure that we will send the correct keys to the AP side, which will in return find the correct address details when sending vouchers to the payees.

During the conversion, we will update the location on the garnishment order with the default location from the Payee Table. However, in some cases that might not be enough to complete the upgrade correctly. The following scenarios are possible:

- Some of your payees might be set up with different invoicing and remitting VendorIDs.
- Some of your payees might have multiple locations.

If you have any payees with either of the above setup scenarios, we will need your input to complete the upgrade.

Following are simplified tasks related to garnishment payee data, which you can perform during the upgrade.

Task L-1-1: Updating Payee Data During the Initial Pass

To update garnishment payee data during the Initial pass:

1. Run the Garnishment Payee Audit Report.
2. Review the report listing and fix any garnishment order or payee setup for the payees that are referenced on the garnishment order, but do not exist in the Payee Table.

See "Prepare Your Database," Running Application Audits, Correcting Garnishment Payee Data, Running the Garnishment Payee Audit Report.

3. Run conversion for the Garn Spec record.

The conversion will perform the following updates:

- Update the Location field on the Garn Spec record with the default location from the Payee Table.
- Update the Location and Remit Address on the Garn Spec field with your input, which in this pass will not be available; therefore, there will be no updates.

See the comments on the Upgrade Data Conversion page. Select HRMS, Upgrade, Data Conversion, and then select the Comments link for Update GARN_SPEC.

4. Run the EE Garn Payee Data Validation Report.
5. Review the report listing and decide what data needs your input to complete the conversion.

See "Complete Database Changes," Validating EE Garn Payee Data.

6. Add your input for updating Garn Payee Data where needed.

Note. These entries will be used in the subsequent pass during the conversion to update Garn Spec records.

See “Complete Database Changes,” Validating EE Garn Payee Data.

Task L-1-2: Updating Payee Data During Move to Production

To update garnishment payee data during the Move to Production pass:

1. Run the Garnishment Payee Audit Report.
2. Review the report listing and fix any garnishment order or payee setup for the payees that are referenced on the garnishment order, but do not exist in the Payee Table.

See “Prepare Your Database,” Running Application Audits, Correcting Garnishment Payee Data, Running the Garnishment Payee Audit Report.

3. Run conversion for the Garn Spec record.

The conversion will perform the following updates:

- Update the Location field on Garn Spec record with the default location from the Payee Table.
- Update Location and Remit Address on the Garn Spec field with your input, which in this pass will be available.

See the comments on the Upgrade Data Conversion page. Select HRMS, Upgrade, Data Conversion, and then select the Comments link for Update GARN_SPEC.

4. Run the EE Garn Payee Data Validation Report.
5. Review the report listing and decide what data needs your input to complete the conversion. This report may contain data if you have created a new garnishment order between upgrade passes with a payee that does not exist on the Payee Table.

See “Complete Database Changes,” Validating EE Garn Payee Data.

6. Add your input for updating Garn Payee Data where needed.

Note. These entries will be used in subsequent Move to Production passes during the conversion to update Garn Spec records. If this is the final Move to Production pass, you need to do manual updates directly in the Create Garnishment or Payee Table component because there will be no more conversions to take care of these entries.

See “Complete Database Changes,” Validating EE Garn Payee Data.

Task L-2: Understanding Rules Changes

This section discusses:

- Understanding Changes to Garnishment Rules
- Updating Rules During the Initial Pass
- Updating Rules During Move to Production

Understanding Changes to Garnishment Rules

In PeopleSoft 9, we have changed the way that we store U.S. garnishment rules data. Even though there is no change to the way that we store Canadian garnishment rules data, due to the fact that all data is stored in the same set of setup tables, there will be some upgrade processing on your garnishments rules tables.

The garnishment rules tables may have the following rules:

- U. S. rules maintained and delivered by Oracle
- Canadian rules maintained and delivered by Oracle
- U.S. rules created and maintained by the user
- Canadian rules created and maintained by the user

You may not have all of the above data. You probably have the rules delivered by Oracle, and in addition, you might have some custom rules for either payroll. In order to ensure that the upgrade processing will work for any combination of data you may have, we decided to do the following conversion on garnishments rules tables:

- Rename garnishments rules tables in your Copy of Production.
- Export U.S. and Canadian rules maintained by Oracle from the New Release Demo database.

There is no change to Canadian rules maintained by us, but redelivering them was a better option than converting them from the renamed tables.

- Import U.S. and Canadian rules maintained by Oracle into your Copy of Production before the conversion.
- Copy Canadian custom garnishment rules, if you currently have any, from renamed tables into garnishments rules tables in your Copy of Production.

We are not going to do any conversion for the U.S. custom garnishment rules, if you currently have any. The changes that we made in garnishment rules tables would require a very complex upgrade with a high probability of creating invalid data in your tables. On the other hand, the flexibility in setting up the rules might allow you to replace your existing custom rule with a rule delivered by Oracle. Depending on whether you decide that you still need the U.S. custom rules or not, you may need to recreate the U.S. custom rules, or you may need to update garnishment orders to replace a U.S. custom rule with some other existing rule.

Following are simplified tasks related to rules changes, which you can perform during the upgrade:

Task L-2-1: Updating Rules During the Initial Pass

To update garnishment rules during the Initial pass:

1. Run the US Custom Garnishment Rule Audit Report.
2. Review the report listing and decide whether you need any of these rules in PeopleSoft 9.

See “Prepare Your Database,” Running Application Audits, Running Upgrade Reports, Running US Custom Garnishment Rule Audit Report.

3. Run conversion for Garn Rule record (GARN_RULE).

The conversion will update the State Law and Rule ID fields with your input, which in this pass will not be available; therefore, there will be no updates.

See the comments on the Upgrade Data Conversion page. Select HRMS, Upgrade, Data Conversion, and then select the Comments link for Update GARN_RULE.

4. Set up US Custom Garnishment Rules.

If you have any U.S. custom garnishments rules that you will need in new release, you will have to re-create them. You can set up the rule using the online component or you can clone any existing rule if the formula is similar to the rule you need to create. You can use the audit report to ensure that all data is set up the way you need it.

See “Complete Database Changes,” Setting Up US Custom Garnishment Rules.

5. Run the EE Garn Rule Data Validation Report.
6. Review the report listing and decide what data needs your input to complete the conversion, in case you want to replace an obsolete rule with an existing rule.

See “Complete Database Changes,” Validating EE Garn Rule Data.

7. Add your input for updating rule data in garnishment orders, where needed.

Note. These entries will be used in the following pass during the conversion to update Garn Rule records.

See “Complete Database Changes,” Validating EE Garn Rule Data.

Task L-2-2: Updating Rules During Move to Production

To update rules during the Move to Production pass:

1. Run the US Custom Garnishment Rule Audit Report.
2. Review the report listing and decide whether you need any of these rules in PeopleSoft 9. Compare the report from the current and previous passes to see whether any new rules were added between upgrade passes.

See “Prepare Your Database,” Running Application Audits, Running Upgrade Reports, Running US Custom Garnishment Rule Audit Report.

3. Run conversion for the Garn Rule record (GARN_RULE).

The conversion will update the State Law and Rule ID fields with your input, which will be available in this pass if you added any.

See the comments on the Upgrade Data Conversion page. Select HRMS, Upgrade, Data Conversion, and then select the Comments link for Update GARN_RULE.

4. Set up US Custom Garnishment Rules.

If you have any new U.S. custom garnishments rules that you have set up between upgrade passes, and you have decided that you will need them in the new release, you must recreate them. You will have to do set up only for the U.S. rules newly added between the upgrade passes. All other U.S. rules set up in previous passes, will be taken care of by running the export/import scripts. You can set up the rule using the online component or you can clone any existing rule if the formula is similar to the rule you need to create. You can use the audit report to ensure that all data is set the way you need it.

See “Complete Database Changes,” Setting Up US Custom Garnishment Rules.

5. Run the Export US Custom Garnishments Rules script.

Run this script to export from your Copy of Production all U.S. custom garnishments rules that you have set up manually in the previous pass.

See “Apply Application Changes,” Completing Application Processes, Exporting US Custom Garnishment Rules.

6. Run the Import US Custom Garnishments Rules script.

Run above script to import into your new Copy of Production all U.S. custom garnishments rules that you have set up manually in the previous pass.

See “Apply Application Changes,” Completing Application Processes, Importing US Custom Garnishment Rules.

7. Run the EE Garn Rule Data Validation Report.
8. Review the report listing and decide what data needs your input to complete the conversion.

This report may contain data if you have created a new garnishment order in between upgrade passes that references a rule that no longer exists in garnishment rules tables.

See “Complete Database Changes,” Validating EE Garn Rule Data.

9. Add your input for updating rule data in garnishment orders, where needed.

Note. These entries will be used in subsequent Move to Production passes during the conversion to update Garn Rule records. If this is the final Move to Production pass, you need to do manual updates directly in the Create Garnishment or Garnishment Rules Tables component, because there will be no more conversions to take care of these entries.

See “Complete Database Changes,” Validating EE Garn Rule Data.

See PeopleSoft Payroll for North America PeopleBook, for your new release.

APPENDIX M

Understanding Service Indicator Changes

This appendix discusses:

- Reviewing Service Indicator Code Upgrade Defaults
- Understanding Basis of Impact
- Analyzing Current Service Impacts and Associations
- Understanding Service Indicator Audits
- Understanding Service Indicator Display Security

Task M-1: Reviewing Service Indicator Code Upgrade Defaults

You should review the changes that have been made to Service Indicator code definitions in PeopleSoft 9. In addition to new functionality that allows you to select whether to use Service Indicator codes with persons or organizations (see “Prepare Your Database,” Making Functional Decisions, Upgrading Defaults for Service Indicators), Service Indicator code definitions include three other new fields, which do not require you to define upgrade defaults:

- **Default Start Date:** If this option is selected for a Service Indicator code, when the code is assigned, it will use the default current system date as the start date.

The Default Start Date check box is cleared during the upgrade process to avoid unnecessary user intervention.

- **Default Start Term:** If this option is selected for a Service Indicator code, when the code is assigned, it will use the default value *0000* (Begin Term – Srv Indicatr Use) as the start term.

The Default Start Term check box is selected during the upgrade process in order to most closely match previous functionality while avoiding unnecessary user interaction.

- **Display in Self Service:** If this option is selected for a Service Indicator code, the code, when assigned, will be visible to a user in Self Service.

Previous functionality allowed only the display of negative Service Indicators (Holds) in Self Service. During the upgrade process, this check box option will be selected for negative Service Indicators and cleared for positive Service Indicators, in order to continue previous functionality without user intervention.

You should analyze the default values for all of these fields on a code-by-code basis after upgrading and make any changes, as needed.

Task M-2: Understanding Basis of Impact

The most significant change to Service Indicators is that Service Impacts now include the attribute Basis of Impact. This provides a consistent logic across modules and products regarding the validity period of an impact; that is, when or whether an impact is currently in effect for an assignee.

In previous releases, a Service Indicator assignment included an Active Term and Active Date; however, because of different functional requirements, various modules within Campus Solutions defined those fields differently. For example, in Financial Aid, Active Term was the only term for which a Service Indicator was in effect; for Enrollment, Active Term was the first term for which a Service Indicator was in effect, and the Service Indicator was in effect until removed.

In Campus Solutions 9, Active Term and Active Date have been changed to Start Term and Start Date, respectively, and the new fields End Term and End Date have been added to allow all modules to define these fields in a consistent manner. In order for the software to determine whether an impact should consider the Date period (Start Date to End Date), Term period (Start Term to End Term), or both, an impact now includes Basis of Impact as an attribute.

Due to this change, it is possible that Service Indicator definitions will exist in your current database that will have associated impacts, each of which in previous releases interpreted Active Term in a different manner. Because Start Term and End Term will now always be interpreted consistently, the functional implications of the Active Term value will need to be considered. If a single Service Indicator definition includes “mixed” impacts (that is, some impacts that define Active Term as the only term, and some that define it as the first term), you may need to split these codes into new definitions to preserve the functional intent of the original assignment.

For example, suppose that Service Indicator Code SF9 is created, and it has Service Impacts CENR (block all enrollments), FAD (block Financial Aid disbursement), and CHECK (block check cashing privileges) associated with it. SF9 is assigned to Bob Smith, EMPLID 1100, with an Active Term of 0560 and an Active Date of 09/01/2006. The Enrollment engine runs, processing enrollments for Term 0570, finds this assigned Service Indicator for Bob Smith, and blocks his enrollment, since 0570 is equal to or greater than 0560. (The enrollment process interpreted Active Term as the first term for which the Service Indicator was in effect). The Financial Aid process runs, finds the impact of FAD, but processes the disbursement, because 0570 > 0560. (The Financial Aid process interpreted Active Term as the *only* term for which the Service Indicator was in effect.)

When you upgrade to PeopleSoft 9, Active Term will change to Start Term, so a direct upgrade will provide the following results: Bob Smith, SF9, Start term = 0560. Now when the Enrollment engine runs, it uses a Start Term value of 0560 and blocks the enrollment successfully. But when disbursements are processed, it *also* blocks the disbursement, because Start Term now always means the first term for which the Service Indicator and its impacts are in effect.

However, if we conversely automatically set an End Term of 0560 (which in PeopleSoft 9 is the functional equivalent of a single term validity period), disbursement will be properly processed and released for term 0570, but enrollment will incorrectly fail to block enrollment processing because the term validity has expired. If you upgrade these two impacts to the same Service Indicator, you will in the process redefine the effect on any assignments of that Service Indicator.

Task M-3: Analyzing Current Service Impacts and Associations

The first step that you should take in upgrading Service Indicators is to analyze your existing service impacts and their associations with existing Service Indicator codes. With your institutional knowledge of how those impacts and codes are being used, you will need to determine the following:

- The basis of impact for each Service Impact.

That is, in which of the following ways is the Service Impact being used:

- In a date-based context (for example, in Student Financials, Transcripts, most Contributor Relations impacts, and many Campus Community-oriented impacts, such as a library fine).
 - In a term-based context (for example, Financial Aid, or possibly some Campus Community-oriented impacts).
 - In a context that is both date-based and term-based. (For example, Enrollments uses both the date, to determine the initial validity period, and the term, to determine whether the term being processed falls within the term validity period.)
- The current association of impacts to Service Indicator codes.

If a code has impacts that would cause a direct mapping to corrupt the original functional intent of the assignment, you will need to “split” that code definition into two or more new code definitions.

A basic SQR report, PUCCR10.SQR, is provided to show you the current Service Impact and code associations. You can use this report to assist you in understanding your current definitions and how you may need to change them, based on the information above.

To upgrade Service Indicator code and impact associations, you will need to decide what values to use for the End Term Equals, “Convert 9999 to,” and Map fields on the Upgrade Service Indicator Code/Impact page:

- End Term Equals value

Because End Term is a new field in PeopleSoft 9, and the functionality in previous releases allowed for different interpretations of the Active Term field, for each code you must select a value for End Term Equals to which you want to upgrade assigned Service Indicators with that code. You should select the value that preserves the functional intent of the assignment.

For example, previously the Service Indicator Code FA1 (Financial Aid 1) interpreted Active Term as the only term for which the assignment was in effect. In PeopleSoft 9, this is equivalent to a Start Term and End Term with the same value (a Start Term of 0560, and an End Term of 0560); that is, any term-based impacts on this Service Indicator Code are interpreted as taking effect when Term 0560 begins, and no longer being in effect when Term 0560 has ended. Therefore, for the code FA1, for the End Term Equals value, you would select the Start Term option.

In another example, the Service Indicator Code REG has several impacts, including CENR. CENR interprets Active Term to mean the first term for which it is in effect and all subsequent terms. In PeopleSoft 9, this is equivalent to a Start Term of 0560 and an End Term set to Blank. There is no defined End Term, and the impact is in effect for all terms subsequent to and including the Start Term. Therefore, for the code REG, for the End Term Equals value, you would select the Blank option.

- Convert 9999 to

Similar to End Term, in previous releases, an Active Term value of 9999 was interpreted by different modules to mean different things. In Financial Aid, an Active Term of 9999 was equivalent to “all terms;”

that is, the Service Indicator was in effect indefinitely. For Enrollment, an Active Term of 9999 meant “no terms;” that is, the Service Indicator, though assigned, would never actually create an impact.

In PeopleSoft 9, the addition of the End Term field removes much of the original functional need for a 9999 value. In PeopleSoft 9, the value 9999 becomes a term infinitely in the future; that is, a term that will never be reached. A Start Term value of 9999 will never take effect (it will not start until some unreachable point in the future). An End Term value of 9999 will be in effect indefinitely and is equivalent, therefore, to an End Term set to Blank. To preserve flexibility of usage, 9999 remains a valid value for Start Term and End Term, but you should be aware of how it is interpreted in PeopleSoft 9.

As with End Term, therefore, for each Service Indicator code you will need to decide how to upgrade the value 9999 for Start Term so that the original functional intent is preserved. For example, Service Indicator Code FA1 interpreted an Active Term of 9999 to mean “all terms.” The functional equivalent of this in PeopleSoft 9 is a Start Term of 0000 (start term is infinitely in the past, and no End Term is defined). Therefore, for the “Convert 9999 to” field, you would select the value 0000.

Note. The “Convert 9999 to” upgrade value *only* applies to the change of Active Term to Start Term. If you set the End Term Equals field to Start Term, this will only apply for rows where Active Term does not equal either 0000 or 9999. The reason for this is that an End Term value of 9999 is the functional equivalent of an End Term set to Blank, while an End Term value of 0000 means that the Service Indicator is never in effect (End Term is infinitely in the past), which is the equivalent of a Start Term of 9999. If the End Term Equals field is set to Start Term for a Service Indicator, any assigned Service Indicator with an Active Term of 0000 or 9999 will end up with an assignment that is never in effect (that is, the Start Term and End Term will be equal to 0000, or the Start Term and End Term will be equal to 9999).

- Mapping codes

After analyzing your existing Service Indicator definitions and assignments, and using your knowledge of your institutional usage of Service Indicators, you will need to either map each existing code directly to a corresponding code in PeopleSoft 9 or split the code, in order to preserve the intention of assigned Service Indicators.

A direct map means exactly that; the row will be upgraded to PeopleSoft 9 with the same structure and impact associations as in your current release. You will still need to make decisions about End Term values and mapping of 9999 values.

Split mapping allows you to create new codes on the fly and reorganize the associated impacts so that term validity periods and 9999 values will retain their previous intended effect. Split mapping is only required for Service Indicator codes with mixed usage impacts.

For example, Service Indicator Code C01 has 3 impacts: LF001 (date-based), CENR (term- and date-based) and FAD (term-based). Because a direct map would mean that one or more of these impacts would lose its original assigned intention, it will be necessary to split this code and regroup the impacts in such a way that existing Service Indicator assignments are not functionally modified.

You could choose to split this Service Indicator Code into two codes: C01, with impacts LF001 and CENR, End Term Equals set to Blank, and the “Convert 9999 to” field set to 9999; and C02, with impact FAD, End Term Equals set to Start Term, and the “Convert 9999 to” field set to 0000. This would ensure that the impact CENR would still be interpreted correctly by Enrollment processing (an Active Term equivalent to first term would be converted to a Start Term with no defined End Term, and any value in the “Convert 9999 to” field means the impact is never in effect), and the impact FAD would still be interpreted correctly by Financial Aid processing (an Active Term equivalent to the *only* valid term would be converted to a Start Term with an equivalent End Term, and any value in the “Convert 9999 to” field means the impact is always in effect).

When these new codes are created, existing assigned Service Indicators will be upgraded accordingly, as will Service Indicator audit data. There is no requirement that previously existing codes be maintained. So, in the above example, you could split C01 into two completely new codes, C11 and C12.

Note. You should use caution when defining codes on the fly for splitting, so that you do not accidentally use the same code twice as a new code for two different previously existing codes, as this could cause significant confusion about the meaning and effect of a Service Indicator assignment. Also note that other than impact associations, all other values for a Service Indicator code definition (such as Positive/Negative, Reasons, and Comments) will be copied to the new code created in a split.

Task M-4: Understanding Service Indicator Audits

Because existing Service Indicator codes may be split into new codes and corresponding assignments, it is important that the Service Indicator audit record accurately reflects the new state of the Service Indicator assignments. Therefore, during the upgrade process, rows that are modified or created during the upgrade of the person and organization Service Indicator assignment tables will have a corresponding adjustment made in the Service Indicator audit table.

If a new row is added because of a split mapping, the following rules will be used:

- The Service Indicator date and time stamp (SRVC_IND_DTTM) will equal the value of the original row.
- The audit date and time stamp (AUDIT_DTTM) will be set to the date and time that the upgrade was run.
- The OprID (AUDIT_OPRID) will equal *UPG* to indicate that the row was added during the upgrade process.
- The audit action (AUDIT_ACTN) will equal *Add*.
- Data for the original rows will remain in place.

Because audit data for Service Indicator assignments to external organizations was not kept in previous releases, the audit table will be populated with new rows for corresponding data in the Service Indicator Organization table (SCC_SI_ORG), using the first four rules listed above.

Task M-5: Understanding Service Indicator Display Security

Service Indicator Display is a new layer of security that allows for the role-based control of the display of Service Indicators on administrative pages. In order to maintain existing functionality, the upgrade process will not impose any Service Indicator display restrictions; that is, all users with access to administrative Service Indicator pages will have at least View access to all Service Indicator codes. If you want to impose restrictions on the display of Service Indicators to administrative users, you should review your institutional requirements and add Service Indicator Display security, as appropriate.

APPENDIX N

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 N-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 N-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 N-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 N-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 N-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 N-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

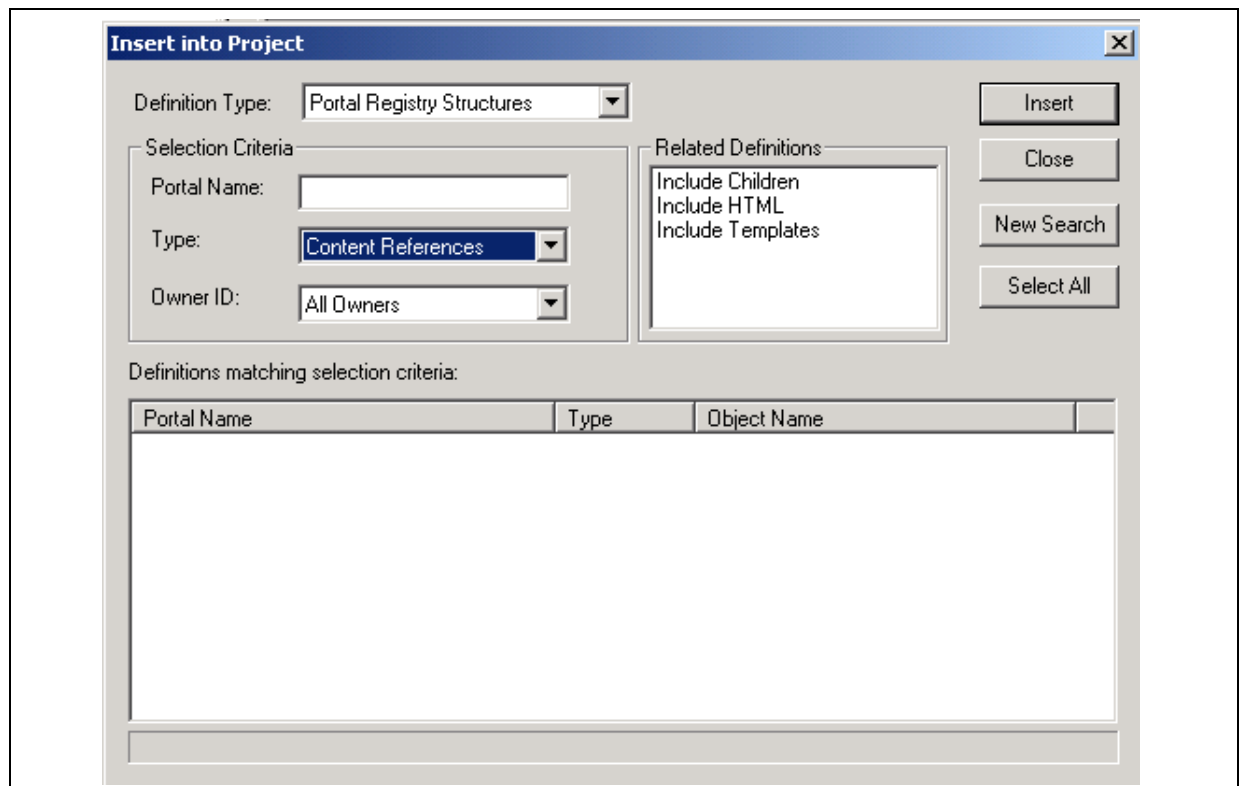
This task applies only to the initial upgrade pass. In this task, you create and modify a project on your target Enterprise Portal database. Then you copy the project definition to the Copy of Production database, where you further modify the project.

Task N-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 then 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 N-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 N-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 N-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
```

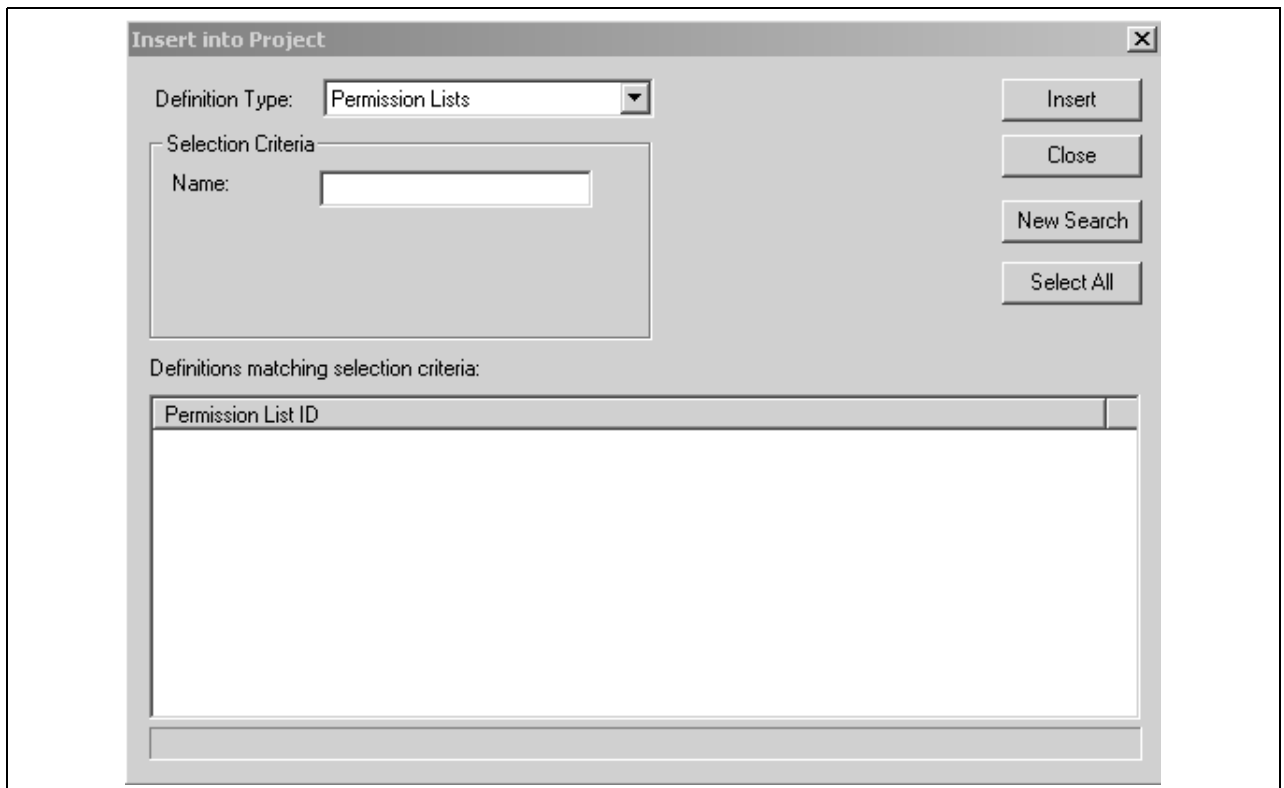
6. Close Data Mover.

Task N-4-5: Creating the Copy of Production Portal Project

Create a project containing all Portal Registry data on your Copy of Production database.

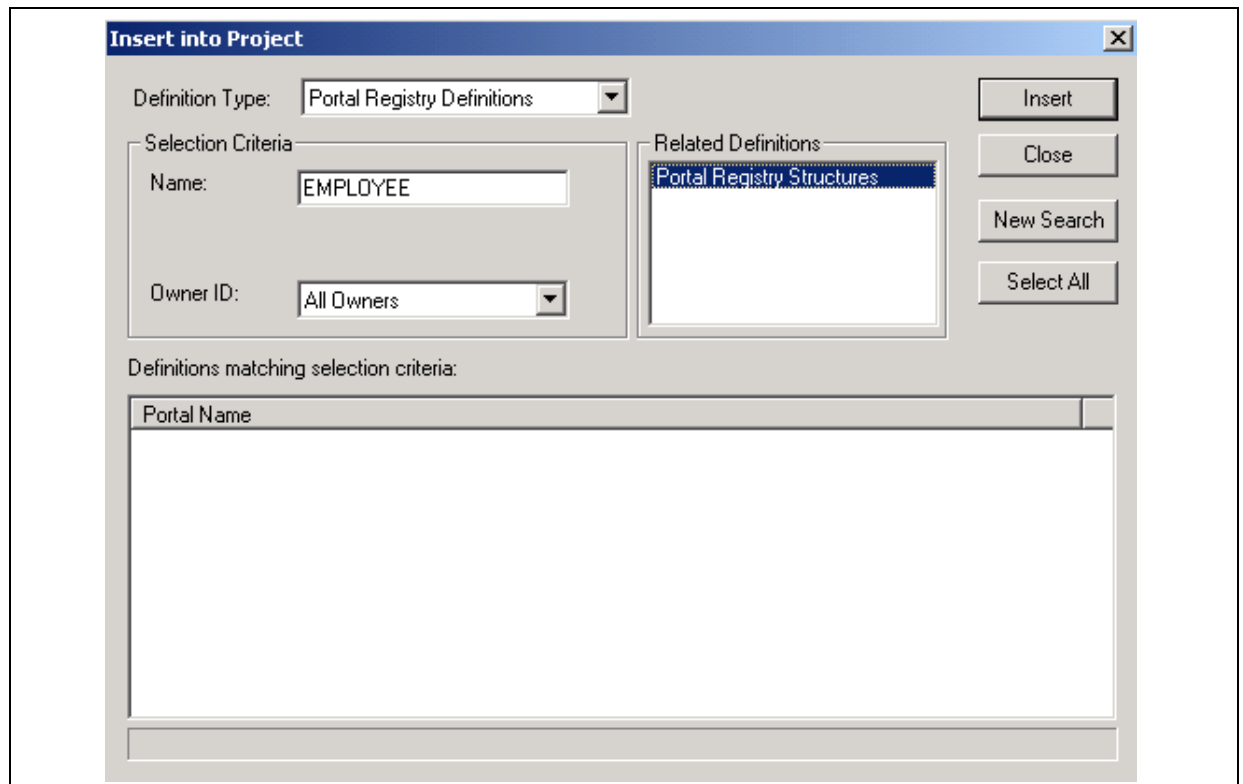
To create the Copy of Production Portal project:

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_PA84XREGISTRY project into your newly created Portal Project.
15. Select File, Save Project to save the updated Portal Project.
16. Close Application Designer.

Task N-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_XXXXXXX*, where *XXXXXXX* 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 N-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 N-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 N-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 N-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 N-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 N-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 N-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 N-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 then 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 N-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 N-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 N-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 N-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 N-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 N-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 N-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 N-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 O

Upgrading with Tax Updates

Upgrading with Tax Updates

Your HRMS Demo database was delivered with a predetermined level of Tax Updates applied. This Tax Update level is listed in the task, “Understanding Your Upgrade.” Oracle recommends you run your upgrade using your Copy of Production at the same Tax Update level as the HRMS Demo database. Your Copy of Production database may be in one of three states relative to the Demo database.

- You will need to update the delivered HRMS Demo database with all tax updates through the latest tax update on your Copy of Production before you start your initial upgrade pass. This is required so you will not lose any of the more current Tax Updates. Do not apply any more updates to your production system until your upgrade is complete and you go live on the new PeopleSoft release. If you apply additional updates to your production system while running the upgrade passes, you will lose those updates during your Move to Production pass. You will then need to reapply the tax updates that were applied to your production since your Initial upgrade pass.
- The Copy of Production database may be current with the Tax Update from the Demo database applied (but not beyond). You do not need to apply any tax updates.
- The Copy of Production database may not be current with the Tax Update from the Demo database. Oracle strongly recommends that you apply all of the Tax Updates to bring your Copy of Production database to the same Tax Update level as your HRMS Demo database. This will assure that your tax information will be correct when you have completed your upgrade. If this is not possible, be aware of the following potential issues and act accordingly:

- To get your Tax Tables up to date, you will need to compare data in the Tax Tables from your Copy of Production to the HRMS Demo database. Any needed updates from the Demo Database should be applied to the Copy of Production database manually. The tables involved are as follows:

PS_CAN_TAX_TBL
 PS_CAN_TAX_CITLUMP
 PS_CAN_TAX_QITLUMP
 PS_CAN_TAX_CITRATE
 PS_CAN_TAX_QITRATE
 PS_CAN_TAX_PROV
 PS_CAN_TAX_PROVNCT
 PS_CAN_TAX_PROVTHR

PS_GARN_RULE_TBL
 PS_GARN_EXEMPT_TBL
 PS_GARN_OPERANDS
 PS_GARN_DE_DEFN
 PS_GARN_DE_DED
 PS_GARN_PRORATE_RL

PS_STATE_TAX_TBL
 PS_STATE_TAXRT_TBL
 PS_ST_OTH_TAX_TBL
 PS_STTAX_RECIP_TBL
 PS_LOCTX_RECIP_TBL
 PS_TAXGR_DEFN_TBL
 PS_TAXGR_BASE_TBL
 PS_TAXGR_CMPNT_TBL
 PS_LOCAL_TAX_TBL
 PS_LOCAL_TAX_TBL2
 PS_SWT_MARSTAT_TBL
 PS_LCLWK_TXRCP_TBL

Note. Garnishments Rules tables GARN_RULE_TBL, GARN_EXEMPT_TBL, and GARN_OPERANDS have a different structure in this release and will be part of data conversion. We will deliver all garnishments rules maintained by us during the upgrade, so there is no need to manually update these tables to bring them to the Tax Update level of the Demo database.

See Appendix: “Understanding Garnishments Changes.”

- You should also review the Tax Update documentation to guide you on specific Tax Updates. This documentation is available on PeopleSoft Customer Connection.

APPENDIX P

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 P-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 P-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 P-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 HRMS, Upgrade, Data Conversion.
3. Enter your upgrade path:
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									
Customize Find View All First 1-25 of 86 Last									
Upgrade Path	Program Name	Group #	Section	Sequence	Active Flag	Description	Comments		
CR80	UPG_CDM	1	CDMA010	10	Active	General Preparation	Comments	+	-
CR80	UPG_CDM	1	CDMX140	20	Active	Upgrade Basic Data Tables	Comments	+	-
CR80	UPG_CP	2	CPA00	100	Active	Upgrade Constraint	Comments	+	-
CR80	UPG_CP	2	CPA01	105	Active	Upgrade User Cd Dett	Comments	+	-

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 P-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 HRMS, Upgrade, Data Conversion.

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 P-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 HRMS, Upgrade, Data Conversion.
3. Enter your upgrade path:
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 P-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 UDATAACNV.

To run UDATAACNV:

1. Using SQRW, run SQR UDATAACNV on your Copy of Production database.
2. When prompted for Upgrade Path, enter:
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.

APPENDIX Q

Using the Comparison Process

This appendix discusses:

- Understanding the Comparison Process
- Understanding Upgrade Compare Reports

Task Q-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 *PSobjectDEFN* 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 RELEASEDTM, 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 Q-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 <i>PPLSOFT</i> , 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 <i>PPLSOFT</i> , 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 <i>PPLSOFT</i> , 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 <i>PPLSOFT</i> , 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 Q-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 Q-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 Q-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 Q-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 Q-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 Q-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	XRFPCL	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	XRFRCL	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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