



PeopleTools 8.44 Release Notes

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PeopleSoft PeopleTools 8.44 Release Notes

Preface

Version 3: 07/06/2004

This PeopleTools maintenance release includes a variety of enhancements and resolves several minor issues found in the previous release. This kind of maintenance release is called a *PeopleTools-only* upgrade, which means that PeopleSoft applications are not affected.

Important! If you skipped any maintenance releases, you should first review the release notes corresponding to the releases that you skipped. For instance, if you're installing the PeopleTools 8.44 update but you skipped PeopleTools 8.43, you should download and review the release notes for PeopleTools 8.43. Do this to familiarize yourself with the previous changes and new features. Most importantly, when upgrading to a new maintenance release, be sure to check the PeopleSoft Platforms database on the PeopleSoft Customer Connection website for any new support details.

Note. If you are installing this version of PeopleTools without having first installed PeopleTools 8.42, use the PeopleTools product CD-ROM as part of the standard installation process described in the *PeopleTools Installation Guide* for your platform.

This document provides an overview of the value proposition associated with the new features and enhancements planned for PeopleTools 8.44. It is a roadmap intended to help you assess the business benefits of PeopleTools 8.44 and plan your information technology (IT) projects and investments.

This document contains updates and corrections as needed to support maintenance releases in a dynamic manner. It provides the most current information available. Refer to the PeopleSoft Customer Connection website regularly to see if there are updates to this document. When the release notes are updated, you will see a new version number and date at the top of this page. Click the Edit History link to keep track of the changes in the document.

PeopleSoft Release Information Publications

The information presented here is part of a sequence of two publications that are designed to provide the most in-depth technical and functional information available at the time of publication:

- Prerelease notes
- Release notes

Prerelease Notes

Prerelease notes are published approximately three months before a release. This document provides an additional level of functional and technical detail, allowing project teams to answer the following key questions:

- What out-of-the-box functionality will change?
- What customizations may be affected?
- What impact will an upgrade or new implementation have on other systems?
- How will these changes affect the organization?

After the project team has reviewed and analyzed the prerelease notes, you should be in the position to determine whether or not to allocate budget and initiate implementation plans.

Release Notes

Release notes are published at the time of general availability (GA), and they validate the final scope of the release. This document identifies the features and enhancements that are available with the GA release of each product. It identifies the finalized technical and functional details that will allow project teams to confirm budgets and complete implementation plans.

Additional Information

There are many additional resources that will help your organization determine how upgrading to this release will affect your organization. Visit the PeopleSoft Customer Connection website frequently to keep apprised of ongoing developments.

See Also

PeopleSoft Customer Connection, Support, Roadmap + Schedules, Release Definitions

PeopleSoft Customer Connection, Education Services

PeopleSoft Customer Connection, Assess Your Needs

PeopleSoft Customer Connection, Support, Documentation, Business Process Maps

PeopleSoft Customer Connection, Support, Documentation, Business Process Maps

PeopleSoft Customer Connection, Support, Data Models

PeopleSoft Customer Connection, Implement, Optimize + Upgrade, Implementation Guide

PeopleSoft Customer Connection, Implement, Optimize + Upgrade, Upgrade Documentation

PeopleSoft Customer Connection, Support, Documentation, Documentation Updates,
PeopleTools, Browsers, Troubleshooting Browser Limitations

About This Document

The new features and enhancements included in this release are grouped according to areas within PeopleTools. The goal is to ensure that you leverage technology to its fullest so that you increase the efficiency and effectiveness of your operations. Please note that the final release may not include every feature discussed in this document. Likewise, a specific feature may become part of a different application or its name may differ from the one cited in this document.

The PeopleTools 8.44 release notes discuss:

- PeopleTools 8.44 value proposition.
- What's new in PeopleTools 8.44.
- Global enhancements.
- Resolved incidents.

PeopleBooks Considerations

The following considerations relate to installing PeopleBooks:

- Never install new PeopleBooks over an existing PeopleBooks website.

Instead, move the existing website into a new directory and then install the new PeopleBooks in the old (empty) directory. This minimizes the amount of reconfiguration required to enable the new installation.
- To move existing PeopleBooks content into the new installation (for example, translated PeopleBooks), refer to the document *Managing the PeopleSoft Online Library and PeopleBooks* on the PeopleSoft Customer Connection website.

Select Patches and Fixes, Documentation Updates, All Product Lines, All in selected Product Line.
- If you are installing PeopleTools and PeopleBooks for the first time, see the *PeopleTools Installation Guide* for your database platform.
- Known PeopleBook issues and corrections as of the posting of these release notes will be posted to the PeopleBook Enhancements and Additions category in the Documentation area of PeopleSoft Customer Connection. Please review this document for important information regarding PeopleTools PeopleBook content.

Upgrade Reminder

You perform PeopleTools upgrades by using the PeopleSoft Upgrade Assistant. Data conversion scripts have been written as Application Engine programs, and you need templates to perform the upgrade. To find documentation and related information for your PeopleTools upgrade, visit www.peoplesoft.com and log in. Using the Site Index link (at the bottom of the page), click the U link and then Upgrade Documentation and Software.

Note. The PeopleTools-only upgrade instructions are no longer provided in the release notes.

PeopleTools 8.44 Value Proposition

In addition to containing fixes, PeopleTools 8.44 ushers in the era of the total ownership experience (TOE) initiative. The TOE initiative applies technology to the people-intensive tasks of maintaining enterprise applications. The goal is to help you improve IT efficiency, streamline the administration and maintenance of your software, and increase the return on your software investment. The main features included in PeopleTools 8.44 supporting the TOE initiative are:

- PeopleSoft Performance Monitor
- PeopleSoft Change Assistant
- PeopleSoft Diagnostics Framework
- Improved user experience

Because TOE is an all-encompassing initiative, many other areas of PeopleTools also benefit. Some of these areas are:

- Reporting technologies
- Integration
- Data archiving
- PeopleSoft Application Designer
- Embedded third-party products

In addition, PeopleTools 8.44 is significant in that for the first time it offers support for the PeopleSoft application server on the Linux operating system, in addition to on other architecture tiers. This makes possible end-to-end Linux-based deployments.

What's New in PeopleTools 8.44

This section provides an overview of the release and discusses the changes and enhancements in the following areas of PeopleTools 8.44:

- System administration and maintenance tools.
- Reporting tools and Process Scheduler.
- Integration tools.
- Development tools.
- Embedded third-party products.
- Platform news.

Complete information on all of the features can be found in the PeopleTools 8.44 PeopleBooks.

Note. New PeopleBooks documentation exists for PeopleTools 8.44. (A separate PeopleBooks CD is included with your PeopleTools shipment.) The release notes may include additional documentation and alert you to the new and modified features.

Review the release notes for any prior 8.4x releases to familiarize yourself with any other features and developments that do not appear in the official documentation.

Overview

The PeopleTools 8.44 release focuses on significantly improving the overall value of your PeopleSoft implementation by lowering the overall total cost of ownership and improving the total ownership experience. In addition to including accumulated bug fixes, the new release incorporates customer feedback and adds features that enable you to run your business more efficiently and profitably.

This document describes the new features in PeopleTools 8.44 and discusses how you can benefit from them. Further information on all of the features can be found in the PeopleTools 8.44 release notes and PeopleBooks that are available when PeopleTools 8.44 becomes generally available.

You can find general availability and upgrade availability information for PeopleTools 8.44 on the PeopleSoft Customer Connection website in the Roadmaps and Schedules section. Select Support, Roadmaps and Schedules, Release Definitions, PeopleTools, PeopleTools 8.44.

System Administration and Maintenance Tools

Many of the enhancements in PeopleTools 8.44 focus on making PeopleSoft system deployments easier to manage over time. These are referred to as *supportability enhancements*, which consist of:

- Software updates.
- Remote support.
- PeopleSoft Diagnostics Framework.
- Configuration management.

Generally, supportability enhancements aim to take the drudgery out of administering and maintaining a PeopleSoft implementation. They enable administrators and other IT resources to focus on activities that add business value.

This section discusses enhancements and changes in the following areas:

- PeopleSoft Change Assistant
- PeopleSoft Performance Monitor
- Security administration
- Data administration tools
- Server tools

PeopleSoft Change Assistant

PeopleTools 8.44 introduces new tools to dramatically improve the process of finding, analyzing, downloading and installing application patches and updates. This slashes the time required for the following common application maintenance tasks:

- Finding and analyzing patches.

PeopleTools 8.44 communicates with PeopleSoft Customer Connection via **web services**, providing you with a list of patch recommendations tailored to the specific maintenance history of your PeopleSoft system.

- Downloading patches.

PeopleTools 8.44 automates the download of your selected application patches.

- Installing patches.

PeopleTools 8.44 automates the process of installing software changes, allowing IT staff to install a series of patches in multiple environments with minimal user intervention.

PeopleSoft Change Assistant includes features to help you expedite the entire software update process. Here are highlights of PeopleSoft Change Assistant functionality:

- You can leverage the new Environment Management hub to gather information about your environments (including licensed products, maintenance history, and so on) and upload this information to the PeopleSoft system.

When you visit the Customer Connection website, this information is used to determine the software updates that are needed for each of those environments.

- You can download the necessary software updates from the Customer Connection website

using PeopleSoft Change Assistant.

- PeopleSoft Change Assistant verifies prerequisites and determines the order to apply the software updates.
- PeopleSoft Change Assistant applies software updates with minimal user intervention, following the delivered PeopleSoft Change Assistant templates.
- Files that are included with software updates can be automatically deployed to the correct locations.
- PeopleSoft Change Assistant keeps a complete history of all software updates applied to each environment.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Change Assistant

PeopleSoft Performance Monitor

A new tool named PeopleSoft Performance Monitor is available to monitor the system.

PeopleSoft Performance Monitor is introduced with PeopleTools 8.44 to help research performance-related issues. The PeopleSoft Performance Monitor is a PeopleTools-based application that enables administrators to store and view performance data. It is capable of monitoring the performance of multiple PeopleSoft application environments. It provides real-time and historical performance metrics and enables administrators to rapidly track and trend system response times across the various tiers of the PeopleSoft system and identify bottlenecks.

Lightweight performance monitoring agents running in a PeopleSoft application environment collect the performance data and send it to PeopleSoft Performance Monitor. The performance monitoring agents are designed to have minimal impact on central processing unit (CPU) and network usage. This design makes PeopleSoft Performance Monitor suitable for real-time monitoring of development, test, and production systems and diagnosing performance issues for a specific online transaction.

A single PeopleSoft Performance Monitor instance can be used to monitor multiple PeopleSoft applications. Development and test systems may be set up to collect and display their own performance information, while production systems are typically set up using separate PeopleSoft Performance Monitor instances.

You can take advantage of the PeopleSoft Performance Monitor when your PeopleSoft application environments are upgraded to PeopleTools 8.44. No code changes or upgrades are required for your PeopleSoft applications to take advantage of the PeopleSoft Performance Monitor.

Introducing PeopleSoft Performance Monitor

PeopleSoft Performance Monitor enables you to monitor the performance of multiple PeopleSoft systems simultaneously. This PeopleTools-based application enables system administrators to:

- Store and view performance data.
- Analyze real-time and historical performance metrics.
- Track and trend system response times across the tiers of the PeopleSoft system.

Lightweight monitoring agents run on the servers in a PeopleSoft system and collect performance data, which they send to PeopleSoft Performance Monitor. Performance Monitor stores all performance data in the database. The monitoring agents impose minimal impact on CPU and network usage, which makes the Performance Monitor suitable for monitoring development, testing, and production systems in real time.

You can use a single PeopleSoft Performance Monitor instance to monitor multiple PeopleSoft applications. You can set up development and test systems to collect and display their own performance information, while production systems are typically monitored by a separate PeopleSoft Performance Monitor instance.

PeopleSoft Performance monitor was designed to be used in production systems. There is a tradeoff between the number of statistics collected and the impact on system resource usage. For on-line systems, it can be configured in such a way that its impact on system performance is minimal (around 5% system resource usage). The PeopleSoft Performance Monitor can also be switched to standby mode on-the-fly so that the impact on system resource usage is negligible. This does not require rebooting or recycling of the server.

Important! PeopleSoft Performance Monitor monitors PeopleSoft systems running on PeopleTools 8.44 and later *only*.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Performance Monitor

“PeopleTools 8.44: PeopleSoft Performance Monitor Database Schema and Use Cases” PeopleBook Enhancement on Customer Connection (www.peoplesoft.com, Customer Connection, Support, Documentation, Documentation Updates, PeopleTools, Performance Monitor)

PeopleSoft Performance Monitor Features

PeopleSoft Performance Monitor enables you to:

- Collect performance and resource usage data.
- Monitor web server performance.
- Monitor application server performance.
- Monitor PeopleSoft Process Scheduler server performance.
- View charts and graphs.
- Enable system monitoring easily.

Collecting Performance and Resource Usage Data

Select areas of PeopleSoft source code have been instrumented so that PeopleSoft Performance Monitor can detect the beginning and completion of key sections of the PeopleTools run-time code and record the durations. The measurement representing the duration of a key section of code is referred to as a *performance measurement unit* (PMU).

In addition to PMUs, the PeopleSoft system retrieves resource usage information from the server's operating system. This enables you to view *events*, which include CPU usage, memory usage, number of servlet requests, and so on. Although each PMU has a measured duration, events do not. Events capture system status at a specific time.

Monitoring Web Server Performance

On the web server, you can track performance issues such as the number of current sessions and open user requests, the percentage of Java Virtual Machines (JVM) resources being used, or the number of requests being handled by a particular PeopleSoft servlet.

Monitoring Application Server Performance

On the application server, you can monitor performance issues such as the request queues, the status of a particular server process, or the amount of virtual memory consumed by a server process, such as PSAPPSRV.

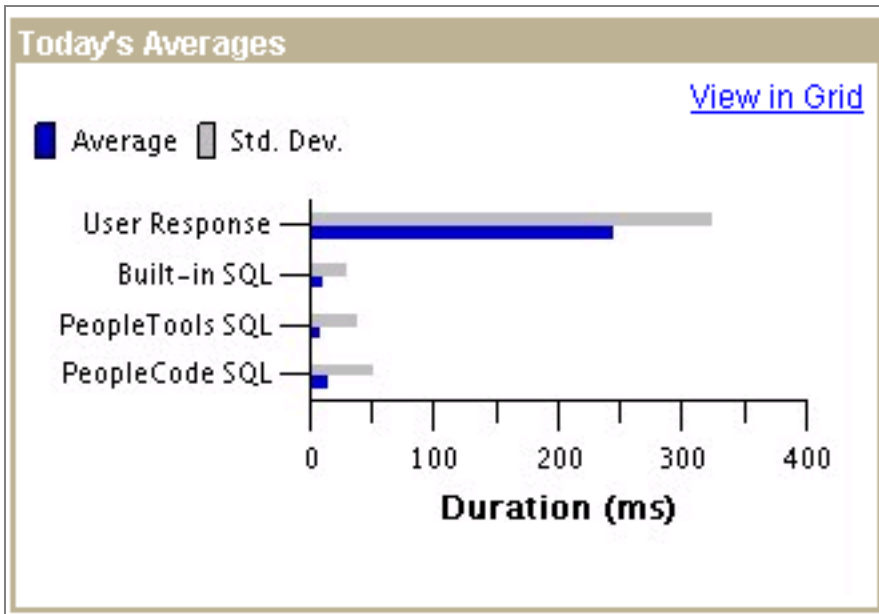
Monitoring Process Scheduler Server Performance

PeopleSoft Performance Monitor enables you to monitor the status of jobs running on the system, the status of the master scheduler, or the server activity of a particular PeopleSoft Process Scheduler server.

Viewing Charts and Graphs

PeopleSoft Performance Monitor provides a variety of PeopleSoft Internet Architecture pages that display charts and graphs that you can use to analyze and communicate performance metrics. The numerous time-based bar charts and pie charts enhance a system administrator's ability to troubleshoot and identify performance issues quickly.

For example, you can view charts displaying average response times for selected PMU metrics.



[Viewing the current day's averages](#)

And you can find out why a user is waiting for a response.

Open PMU Trees

System ID: 2 Database Name: F844902B

User ID:

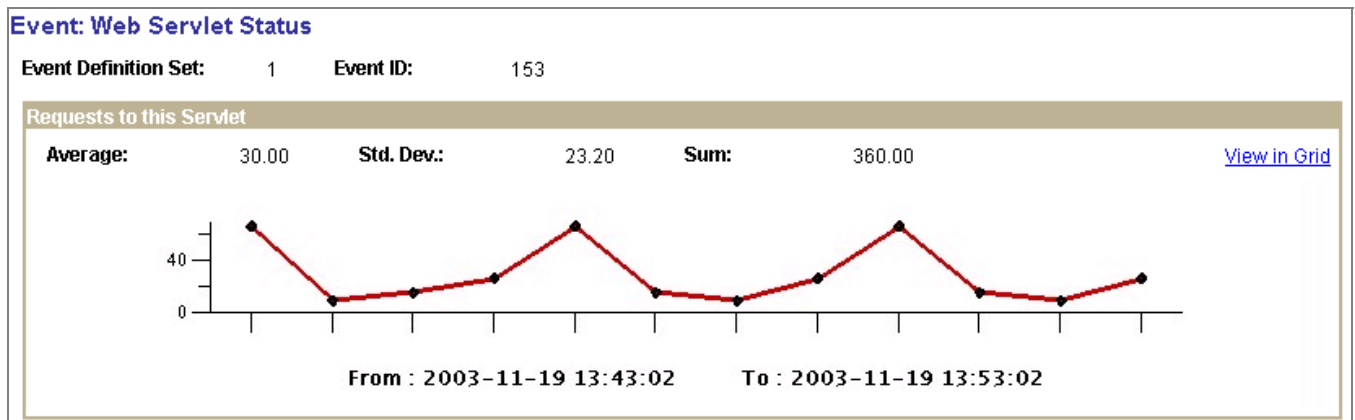
Total Trees Retrieved: 1 Currently displaying: 1

Left | Right

- Open PMU Tree
 - 806.00 sec - PIA Request
 - 806.00 sec - JOLT Request
 - 799.52 sec - Tuxedo Service PCode and SQL
 - 799.00 sec - Tuxedo Service Summary
 - 799.00 sec - ICPanel
 - 799.00 sec - PeopleCode Program Execution
 - 799.00 sec - PeopleCode SQL Execute

Viewing an Open User Request

You can also view charts related to event metrics.



Viewing requests to a servlet

Enabling System Monitoring

To begin using PeopleSoft Performance Monitor, you must first install and run a PeopleSoft application system, such as PeopleSoft Human Resources Management, PeopleSoft Customer Relationship Management (PeopleSoft CRM), or PeopleSoft Financials. After that, you enable performance monitoring by specifying the URL of the monitoring system. This is the URL to which the monitored system sends performance data. Once you've set the URL, the system immediately begins collecting performance data and sending it to the monitoring system.

All of the required elements of PeopleSoft Performance Monitor are installed during the PeopleSoft system installation; they do not require extra installation steps.

Security Administration

This section discusses changes and enhancements to the following areas:

- Pluggable cryptography.
- Lightweight Directory Access Protocol (LDAP) Business Interlink definitions.
- Single signon configuration considerations.
- Large populations of role members.
- Automatic role import using LDAP.
- The RevalidatePassword function and the WWW_Authentication solution.

Pluggable Cryptography

Pluggable encryption augments the existing support for encryption in prior versions of PeopleTools. This technology enables you to secure critical PeopleSoft application data and communicate securely with other businesses. It enables you to extend and improve cryptographic support for data in PeopleTools, and it provides strong cryptography with the flexibility to change and grow by incrementally acquiring stronger and more diverse algorithms for encrypting data.

Pluggable Cryptography Features

You can encrypt any data used in an application by invoking PeopleCode to apply your preferred encryption algorithms. You can obtain these algorithms from various vendors' cryptographic libraries, and you can select the capabilities that you want from each library.

The features of pluggable cryptography include:

- Access to a robust set of algorithms (symmetric and asymmetric ciphers, password-based encryption, hashes, media access controls, signatures, enveloping, encoding, and writing and processing secured messages).
- The ability to encrypt, decrypt, sign, and verify fields in a database.
- The ability to encrypt, decrypt, sign, and verify external files.
- A secure keystore for encryption keys of widely varying types.
- The ability to convert data from one encryption scheme to another.

The functional elements of pluggable cryptography are:

- A dynamic link library (DLL) for each supported encryption library that uses C glue code to convert each cryptographic library's application programming interface (API) into a unified plug-in with an API accessible from PeopleCode.
- A universal keystore that handles all forms of encryption keys, protected with row-level security.
- A sequence, or chain, of algorithms that you define for a specific encryption task.

These algorithms are applied in turn to transform data from its original form into a desired final form.

- An encryption profile that you define as an instance of an algorithm chain applicable to a specific encryption task.
- The PeopleCode crypt class for accessing the algorithm chains that you define.

PeopleTools 8.44 comes with an encryption plug-in and associated API glue code to support the OpenSSL encryption library, and the plug-in is ready to implement out of the box. PeopleTools 8.44 also comes with conversion code that supports the PGP encryption library, which you can license from PGP Corporation to enable this functionality.

You can develop glue code to produce plug-in wrappers for other encryption libraries of your choice. The plug-ins make their APIs accessible to PeopleCode, and the new algorithms become as easily available as the delivered algorithms. You can find development information and examples of glue source code in *PS_HOME\src\pspetsl* and *PS_HOME\src\pspetpgp*.

See Also

PeopleTools 8.44 PeopleBook: Security Administration, “Working with Pluggable Cryptography”

LDAP Business Interlink Definitions

For the LDAP_BIND, LDAP_SEARCH, LDAP_SEARCHBIND, and LDAP_URLBIND business interlink definitions, the setting value required for the SSL_DB parameter has changed. You must enter the location of the Netscape iPlanet certificate database, not its filename. For example, if the database is *c:\peoplesoft\certificates\cert7.db*, you should enter *c:\peoplesoft\certificates*, not *cert7.db*.

Single Signon Configuration Considerations

Specifying authentication domains incorrectly for multiple PeopleSoft Internet Architecture installations can produce single signon errors.

To prevent two PeopleSoft applications from erroneously attempting to employ single signon, make sure that the authentication domain that you specify for one application's web server is not a subset of the authentication domain that you specify for the other. For example, if the PeopleSoft CRM web server has an authentication domain of *.user.mycompany.com*, the Financials web server authentication domain must not be *.mycompany.com* (the superset of the CRM server domain) or *.fin.user.mycompany.com* (a subset of the CRM server domain). It can, however, be *.fin.mycompany.com* (or any subset of that domain).

If you want two PeopleSoft applications to employ single signon, you must ensure that each application contains a definition of the other as a trusted node, and you must specify the same authentication domain for both applications' web servers during PeopleSoft Internet Architecture setup.

See Also

PeopleTools 8.44 PeopleBook: Security Administration, “Setting Up Digital Certificates and Single Signon,” Setting Up Single Signon

Large Populations of Role Members

You use the Roles - Members page and the Roles - Dynamic Members page to view the current lists of role members and dynamic role members, respectively. The following chunking behavior applies to both pages.

If the database contains more than 1000 role members, the page initially retrieves only the first 1000. You can view the other chunks of 1000 members one chunk at a time, either by searching for a user ID or by using the navigation buttons above the Members grid.

See Also

PeopleTools 8.44 PeopleBook: Security Administration, “Working with Roles,” Defining Role Options

Automatic Role Import Using LDAP

You can enable an application to automatically apply roles to users using LDAP. When signing in to the application, a user provides a value for the search attribute that you specify in the LDAP authentication map. The system uses that attribute value to search for the user's entry in the LDAP directory, and it imports the group containing the entry to the PSOPRDEFN table as the user's role.

To enable this automatic role import feature:

1. Define the LDAP groups with names that exactly match the roles defined for your application.
2. Clear the Use Default Role check box on the User Profile Map - Mandatory User Properties page.
3. Leave the Role Name and Role Attribute fields on the page blank.

See Also

PeopleTools 8.44 PeopleBook: Security Administration, “Employing LDAP Directory Services,” Creating User Profile Maps

The RevalidatePassword Function and the WWW_Authentication Solution

The RevalidatePassword PeopleCode function does not work during a user session for which you're using the WWW_Authentication external authentication solution.

In WWW_Authentication, the PeopleSoft system performs no validation of users and their passwords. The signin PeopleCode simply accepts the web server's indication that the user is properly authenticated. The PeopleSoft application has no way to revalidate the user's password in this case, so you shouldn't call RevalidatePassword after WWW_Authentication has been used.

You can determine whether WWW_Authentication has been used by examining a global variable. The signin PeopleCode for WWW_Authentication sets the PeopleCode global variable called *&authMethod* to the value **WWW** when a successful signin occurs. In PeopleCode where you want to call RevalidatePassword, first examine *&authMethod*. If it's not equal to **WWW**, you can call the function.

See Also

PeopleTools 8.44 PeopleBook: Security Administration, “Working with Signon PeopleCode and User Exits,” Understanding the Delivered External Authentication Solutions

Data Administration Tools

This section discusses changes and enhancements to the following areas:

- PeopleSoft Data Archive Manager.
- PeopleSoft Diagnostic Framework.
- PeopleSoft Data Mover.
- PeopleSoft Configuration Manager.
- PeopleBook documentation for database management system (DBMS) administration.

PeopleSoft Data Archive Manager

Today many organizations use third-party solutions to archive large volumes of data from their production databases. The new tool called PeopleSoft Data Archive Manager (included with PeopleTools 8.44) is the common and preferred method to archive high-volume data across all PeopleSoft applications. PeopleSoft Data Archive Manager supports specific archive formats in order to meet certain regulatory requirements such as JFMIP, NARA, GAO and NIST. Because the new archival functionality is included with PeopleTools, it can reduce customers' third-party software license and maintenance costs. Data Archive Manager enables administrators to generate **archive templates** using PeopleSoft Query. With the release of PeopleTools 8.44, the Archive Data tool that was delivered with PeopleSoft 8.40 through 8.43 is a deprecated feature.

PeopleSoft Data Archive Manager in PeopleTools 8.44 provides an integrated and consistent framework for archiving data from PeopleSoft applications. Using PeopleSoft Data Archive Manager you can:

- Define archive objects.

An archive object is a collection of records to be archived. The object definition determines how you archive data from a table. PeopleSoft Data Archive Manager archives data based on a user-specified query for base tables within an archive object. For nonbase tables within an archive object, it archives data based on the archived data of the base table. Query definitions are not required for nonbase tables.
- Define archive queries.

PeopleSoft Data Archive Manager uses PeopleSoft Query to define selection criteria from the base table of the base archive object (for example, archive all rows in JRNL_HEADER where BUSINESS_UNIT = 'ABC01').
- Define archive templates.

You can create an archive template based on a collection of archive objects and the criteria that you use to archive those objects. An archive template can contain multiple objects and multiple queries. Within the archive template, you must specify which Application Engine processes to run before and after the data has been archived, for each of the archiving processes.
- Archive data to history.

You can submit archive jobs in a batch using PeopleSoft Process Scheduler. Run parameters include the archive ID, archive process, commit process, archive query, and query bind variables. You don't have to make any commits to the database until the entire batch is complete.

- Audit archives.

To facilitate auditing of the processed transactional data, PeopleSoft Data Archive Manager retains a record of the following:

- Which process was executed.
 - Who ran the batch process.
 - When the process was executed.
 - Which archive ID and record were affected.
 - Which Structure Query Language (SQL) statement was executed.
- Access all functionality in PeopleSoft Data Archive Manager (including the Query Manager) through a homepage.

PeopleSoft Diagnostic Framework

PeopleSoft Diagnostic Framework is designed to facilitate the ***diagnosis and resolution of incidents by PeopleSoft Global Support Center (PeopleSoft GSC)***. It enables the critical system data to be packaged and sent to PeopleSoft GSC without the need for IT intervention. This reduces administration overhead and enables PeopleSoft GSC to quickly solve customer issues.

PeopleTools provides a framework for defining and retrieving application data diagnostics within the PeopleSoft Internet Architecture environment. The diagnostic framework retrieves diagnostic information from a PeopleSoft database.

Using PeopleSoft Diagnostic Framework, you can:

- Perform diagnostic tests on your system with minimal instructions from PeopleSoft GSC.
These tests answer application-specific or setup-related questions to help development and user support teams diagnose and troubleshoot problems that you may encounter.
- View the diagnostic test output on web pages that you can open using any supported browser.
- Email the output web pages to an application expert.

PeopleSoft Diagnostic Framework includes:

- Delivered base classes in application packages.
- Delivered application diagnostic plug-ins developed from the base classes and application packages.
- The capability to extend delivered base classes to develop additional diagnostic plug-ins and to register the new plug-ins.
- A common user interface for all diagnostic plug-ins.

The diagnostics framework is installed automatically when you install PeopleTools. Use standard PeopleSoft security administration to grant access to the user interface.

PeopleSoft Data Mover

There are two enhancements to PeopleSoft Data Mover.

Increased Maximum Number of Columns in Each Table

In PeopleSoft Data Mover, the maximum number of columns for each table has been increased from 250 to 500. Records defined using IMPORT and EXPORT can now have a maximum of 500 columns and multiple long columns within the limitation for long columns set by your database platform.

Trace Setup for PeopleSoft Data Mover

There are two environment variables required to set up trace for PeopleSoft Data Mover: PS_SERVER_CFG and PS_SERVDIR. The environment variable that PS_SERVER_CFG points to is in the \$PS_HOME/setup/psdmtx.cfg file that comes with the PeopleSoft system. The environment variable that PS_SERVDIR points to resides in the output log directory. To set a specific trace, you must edit the psdmtx.cfg file to set the trace bit flag specified in the file. After running Data Mover, the trace file is located in the \$PS_HOME/log/LOGS/AE__0 directory.

To set a PeopleSoft Data Mover trace:

1. Start a new telnet session.

```
cd $PS_HOME
. ./psconfig.sh
vi $PS_HOME/setup/psdmtx.cfg
```

2. Specify the trace flag.

```
EXPORT PS_SERVER_CFG=$PS_HOME/setup/psdmtx.cfg
EXPORT PS_SERVDIR=$PS_HOME/log
The trace file is located in $PS_HOME/log/LOGS/AE__0/AE__0.trc
```

PeopleSoft Configuration Manager

A new SQL Informational Trace check box appears on the Configuration Manager - Trace page. Select this check box to report on informational messages returned by SQL commands. Specifically, the system traces information messages from the Runstats command on DB2 Universal Database (UDB) for z/OS when the command is executed as a result of a %UpdateStats meta-SQL command. Other informational messages may be added in the future.

PeopleBook Documentation for DBMS Administration

PeopleTools documentation now provides DBMS-specific administration information in the appendixes to *PeopleTools 8.44 PeopleBook: Data Administration Tools*. The appendixes provide guidelines for administering the following supported platforms:

- Microsoft SQL Server.
- DB2 UDB for OS/390 and z/OS.

- DB2 UDB for UNIX, Windows, and Linux.
- Informix.
- Oracle.
- Sybase.

See Also

PeopleTools 8.44 PeopleBook: Data Administration Tools

Server Tools

This section discusses changes and enhancements in the following areas:

- Environment management
- Gather utility
- Quick Configuration option
- Testing data integrity with SYSAUDIT
- Changed and updated features

Environment Management

Many customers administer and maintain more than one PeopleSoft environment (for example, development, test, training, production and more). **Environment Management Framework** in PeopleTools 8.44 enables an administrator to view all PeopleTools environment information from a single location.

The purpose of environment management is to gather installation, configuration, and update information and place it in a centralized location. PeopleSoft Environment Management Framework consists of a hub and an agent. The PeopleSoft Pure Internet Architecture installation places the hub on the web server. The agent is installed on the various servers for which information is collected (for example, the PeopleSoft Process Scheduler server and the database server).

The environment management hub is the repository for storing configuration information gathered by the new environment management agents.

An environment management agent is a special type of peer. (A peer maintains a dialog with the hub. Peers communicate with other peers through the hub.) Agents reside on every machine in the PeopleSoft system—the application server, the Process Scheduler server, the web server, and so on. There is one agent per machine. These agents publish configuration information about the box on which they reside and send this information to the hub. Agents start up when you start each machine.

There are two other peers available in PeopleTools 8.44: PeopleSoft Change Assistant and the Environment Management Viewer tool. Change Assistant uses Environment Management Framework to receive update and configuration information that is published in the hub by the agents. You need to use environment management for updates and fixes, but not for a full enterprise upgrade. The Environment Management Viewer is a diagnostic tool intended for creating a snapshot of the information published to the hub.

Handling Update Patches

After you apply an update patch to the PeopleSoft Internet Architecture web server hosting the Environment Management hub, the hub becomes inaccessible to the Environment Management agents and viewer, as well as to Change Assistant.

To make the Environment Management hub accessible:

1. Stop all of your Environment Management agents:
 - Under Windows, launch `PS_HOME\PSEMAgent\StopAgent.bat`
 - Under UNIX, launch `StopAgent.sh`
2. If you're running Change Assistant, stop it by closing the Change Assistant window.
3. If you created a new web domain on the same machine, using the same HTTP port number as the one used before you applied the patch, you must delete certain directories.

Delete the following directories under `PS_HOME/PSEMAgent`, `PS_HOME/PSEMViewer`, and the Change Assistant install directory (typically `C:\Program Files\PeopleSoft\ChangeAssistant`):

- `envmetadata/data/ids`
 - `envmetadata/PersistentStorage`
 - `envmetadata/transactions`
4. If you created a new web domain on a different machine, or using a different HTTP port number than the one used before you applied the patch, you must do the following:

Update the **hubURL** property in each of the `envmetadata/config/configuration.properties` files under `PS_HOME/PSEMAgent`, `PS_HOME/PSEMViewer`, and the Change Assistant install directory (typically `C:\Program Files\PeopleSoft\ChangeAssistant`). Update the **hubURL** property in each case with the URL of the new web domain.

Note. For Change Assistant, you can also edit the Environment Management hub URL by starting Change Assistant, then selecting Options, Environment Management Hub, and filling in the Server URL field with the new URL.

5. Restart the Environment Management agents:
 - Under Windows, launch `PS_HOME\PSEMAgent\StartAgent.bat`
 - Under UNIX, launch `StartAgent.sh`

See Also

PeopleTools 8.44 PeopleBook: Server Tools, "Using the Environment Management Components"

Gather Utility

The Gather Utility facilitates communications between PeopleSoft GSC and customers regarding technical questions or issues. PeopleSoft GSC directs you to the Gather Utility when problems arise. You can also use a self-service website to run this utility and submit relevant information about your problems or issues.

With its simple command-line interface, the Gather Utility is a small java application that can run on any platform to collect files from the following environments:

- Application server.
- Web server.
- Any additional files that you select (SQL trace files, PeopleCode trace files, and so on).

The collected files are placed in a single Java archive (JAR) file (with psft.jar as the default name) in the temp directory. Subsequently, these files are sent to the PeopleSoft GSC.

Quick Configure Option

You can now quickly configure your domain by using the Quick Configure option at any time, not just the first time you create the domain. In addition, when you select the detailed configuration option, all the values that you enter are saved until you modify them again.

To quickly configure a domain:

1. Select option 4 (Configure this domain) from the PeopleSoft Domain Administration menu to access the Quick Configure menu.

This is akin to the first time you create a domain. PSADMIN presents you with all the parameters that are most commonly changed when setting up a demonstration or test domain.

2. If you want to configure the rest of the parameters that are not presented in option 4, then select option 12 (Custom Configuration) to view the long list.

To change the value of a parameter under Settings, enter the number corresponding to the setting, and then enter the new value at the prompt.

To change the value of a parameter under Features, simply enter the number corresponding to the feature and the option toggles on and off.

Note. All values that you change remain in effect until you modify them again.

Testing Data Integrity with SYSAUDIT

A number of SYSAUDIT integrity tests have changed for the current release, and new queries have been added to several of the tests. The following tables list and explain only the new or changed queries. The information presented here supersedes any information about the same queries in the 8.44 Server Tools PeopleBook.

Security Integrity

Query	Description	Resolution
SEC-1	<p>Authorized Signon Operator does not exist in the Class Definition table. Incomplete permission list: Orphan signon times: (Verifies the existence of permission lists owning signon times.)</p>	<p>Delete the extra signon times. If this is a permission list that should exist, recreate it through PeopleTools Security.</p> <pre>DELETE FROM PSAUTHSIGNON WHERE CLASSID='x'</pre>
SEC-28	<p>Invalid entries in the PSAUTHITEM table.</p>	<pre>DELETE FROM PSAUTHITEM WHERE (PSAUTHITEM.MENUNAME NOT LIKE 'WEBLIB_%' AND PSAUTHITEM.MENUNAME NOT IN ('CLIENTPROCESS', 'DATA_MOVER', 'IMPORT_MANAGER', 'OBJECT_SECURITY', 'QUERY', 'PERFMONPPMI') AND PSAUTHITEM.MENUNAME NOT LIKE ('APPLICATION_DESIGNER%')) AND PSAUTHITEM.MENUNAME <>'REN' AND NOT EXISTS (SELECT 'X' FROM PSMENUITEM MI WHERE PSAUTHITEM.MENUNAME = MI.MENUNAME AND PSAUTHITEM.BARNAME = MI.BARNAME AND PSAUTHITEM.BARITEMNAME = MI.ITEMNAME AND (MI.ITEMTYPE IN (0, 1, 2, 3, 4, 6, 7, 8, 10, 11) OR (MI.ITEMTYPE = 5 AND EXISTS (SELECT 'X' FROM PSPNLGRPDEFN GD, PSPNLGROUP GI WHERE MI.PNLGRPNAME = GD.PNLGRPNAME AND MI.MARKET = GD.MARKET AND GD.PNLGRPNAME = GI.PNLGRPNAME AND GD.MARKET = GI.MARKET AND PSAUTHITEM.PNLITEMNAME = GI.ITEMNAME))) OR (MI.ITEMTYPE = 9 AND EXISTS (SELECT 'X' FROM PSPCMNAME PCN, PSPCMPCP PCP WHERE PCN.OBJECTID1 = 3 AND PCN.OBJECTVALUE1 = MI.MENUNAME AND PCN.OBJECTID2 = 4 AND PCN.OBJECTVALUE2 = MI.BARNAME AND PCN.OBJECTID3 = 5 AND PCN.OBJECTVALUE3 = MI.ITEMNAME AND PCN.OBJECTID4 = 12 AND PCN.OBJECTVALUE4 = 'ItemSelected' AND PCN.OBJECTID1 = PCP.OBJECTID1 AND PCN.OBJECTVALUE1 = PCP.OBJECTVALUE1 AND PCN.OBJECTID2 = PCP.OBJECTID2 AND PCN.OBJECTVALUE2 = PCP.OBJECTVALUE2 AND PCN.OBJECTID3 = PCP.OBJECTID3</pre>

Query	Description	Resolution
		<pre> = PCP.OBJECTID3 AND PCN.OBJECTVALUE3 = PCP.OBJECTVALUE3 AND PCN.OBJECTID4 = PCP.OBJECTID4 AND PCN.OBJECTVALUE4 = PCP.OBJECTVALUE4) OR (MI.ITEMTYPE = 12 AND EXISTS (SELECT 'X' FROM PSXFERITEM XI WHERE MI.MENUNAME = XI.MENUNAME AND MI.ITEMNAME = XI.ITEMNAME)))) OR (PSAUTHITEM.MENUNAME LIKE 'WEBLIB_%' AND NOT EXISTS (SELECT 'X' FROM PSPCMPCP PCP WHERE PCP.OBJECTID1 = 1 AND PCP.OBJECTVALUE1 = PSAUTHITEM.MENUNAME AND PCP.OBJECTID2 = 2 AND PCP.OBJECTVALUE2 = PSAUTHITEM.BARNAME)) OR (PSAUTHITEM.MENUNAME IN ('CLIENTPROCESS', 'DATA_MOVER', 'IMPORT_MANAGER', 'OBJECT_SECURITY', 'QUERY', 'PERFMONPPMI') AND (PSAUTHITEM.BARNAME <> ' ' OR PSAUTHITEM.BARITEMNAME <> ' ' OR PSAUTHITEM.PNLITEMNAME <> ' ')) OR (PSAUTHITEM.MENUNAME LIKE ('APPLICATION_DESIGNER%') AND ((PSAUTHITEM.BARNAME <> ' ' AND PSAUTHITEM.BARNAME NOT IN (SELECT OBJNAME FROM PS_APP_DES_OBJECTS WHERE PSAUTHITEM.BARNAME = OBJNAME)) OR PSAUTHITEM.BARITEMNAME <> ' ' OR PSAUTHITEM.PNLITEMNAME <> ' ')) OR (PSAUTHITEM.MENUNAME = 'REN' AND ((PSAUTHITEM.BARNAME <> ' ' AND PSAUTHITEM.BARNAME NOT IN (SELECT OBJNAME FROM PS_APP_DES_OBJECTS WHERE PSAUTHITEM.BARNAME = OBJNAME)) OR PSAUTHITEM.BARITEMNAME <> ' ' OR PSAUTHITEM.PNLITEMNAME <> ' ')) </pre>

PeopleCode Integrity

Query	Description	Resolution
PEOPLECODE-1	The PeopleCode Name table contains a program name that does not exist in PcmProgram table.	<pre> DELETE FROM PSPCMNAME WHERE NOT EXISTS (SELECT 'X' FROM PSPCMPCP B WHERE B.OBJECTID1 = PSPCMNAME.OBJECTID1 AND </pre>

Query	Description	Resolution
		<pre>B.OBJECTVALUE1 = PSPCMNAME.OBJECTVALUE1 AND B.OBJECTID2 = PSPCMNAME.OBJECTID2 AND B.OBJECTVALUE2 = PSPCMNAME.OBJECTVALUE2 AND B.OBJECTID3 = PSPCMNAME.OBJECTID3 AND B.OBJECTVALUE3 = PSPCMNAME.OBJECTVALUE3 AND B.OBJECTID4 = PSPCMNAME.OBJECTID4 AND B.OBJECTVALUE4 = PSPCMNAME.OBJECTVALUE4 AND B.OBJECTID5 = PSPCMNAME.OBJECTID5 AND B.OBJECTVALUE5 = PSPCMNAME.OBJECTVALUE5 AND B.OBJECTID6 = PSPCMNAME.OBJECTID6 AND B.OBJECTVALUE6 = PSPCMNAME.OBJECTVALUE6)</pre>
PEOPLECODE-2	<p>The PeopleCode Program table contains a program name that does not exist in the PcmName table.</p>	<pre>DELETE FROM PSPCMPROG WHERE NAMECOUNT <> 0 AND NOT EXISTS (SELECT 'X' FROM PSPCMNAME B WHERE PSPCMPROG.OBJECTID1 = B.OBJECTID1 AND PSPCMPROG.OBJECTVALUE1 = B.OBJECTVALUE1 AND PSPCMPROG.OBJECTID2 = B.OBJECTID2 AND PSPCMPROG.OBJECTVALUE2 = B.OBJECTVALUE2 AND PSPCMPROG.OBJECTID3 = B.OBJECTID3 AND PSPCMPROG.OBJECTVALUE3 = B.OBJECTVALUE3 AND PSPCMPROG.OBJECTID4 = B.OBJECTID4 AND PSPCMPROG.OBJECTVALUE4 = B.OBJECTVALUE4 AND PSPCMPROG.OBJECTID5 = B.OBJECTID5 AND PSPCMPROG.OBJECTVALUE5 = B.OBJECTVALUE5 AND PSPCMPROG.OBJECTID6 = B.OBJECTID6 AND PSPCMPROG.OBJECTVALUE6 = B.OBJECTVALUE6)</pre>
PEOPLECODE-3	<p>The PeopleCode Program table name count does not match the record count in PcmName table.</p>	<pre>UPDATE PSPCMPROG SET NAMECOUNT = (SELECT COUNT(*) FROM PSPCMNAME C WHERE C.OBJECTID1 = PSPCMPROG.OBJECTID1 AND C.OBJECTVALUE1 = PSPCMPROG.OBJECTVALUE1 AND C.OBJECTID2 = PSPCMPROG.OBJECTID2 AND C.OBJECTVALUE2 = PSPCMPROG.OBJECTVALUE2 AND C.OBJECTID3 = PSPCMPROG.OBJECTID3 AND C.OBJECTVALUE3 = PSPCMPROG.OBJECTVALUE3 AND C.OBJECTID4 = PSPCMPROG.OBJECTID4 AND C.OBJECTVALUE4 = PSPCMPROG.OBJECTVALUE4 AND C.OBJECTID5 = PSPCMPROG.OBJECTID5 AND C.OBJECTVALUE5 =</pre>

Query	Description	Resolution
		PSPCMPROG.OBJECTVALUE5 AND C.OBJECTID6 = PSPCMPROG.OBJECTID6 AND C.OBJECTVALUE6 = PSPCMPROG.OBJECTVALUE6)

Query Integrity

Query	Description	Resolution
QUERY-01	Query Definition Select count does not match the record count that is in the Query Select table.	<p>The query definition is corrupt. Run the following SQL to delete the entire query definition:</p> <pre>DELETE FROM PSQRYDEFN WHERE OPRID = 'X' AND QRYNAME = 'Y'</pre> <pre>DELETE FROM PSQRYSELECT WHERE OPRID = 'X' AND QRYNAME = 'Y'</pre> <pre>DELETE FROM PSQRYRECORD WHERE OPRID = 'X' AND QRYNAME = 'Y'</pre> <pre>DELETE FROM PSQRYFIELD WHERE OPRID = 'X' AND QRYNAME = 'Y'</pre> <pre>DELETE FROM PSQRYCRITERIA WHERE OPRID = 'X' AND QRYNAME = 'Y'</pre> <pre>DELETE FROM PSQRYEXPR WHERE OPRID = 'X' AND QRYNAME = 'Y'</pre> <pre>DELETE FROM PSQRYBIND WHERE OPRID = 'X' AND QRYNAME = 'Y'</pre>
QUERY-02	Query Definition Expression count does not match the record count in the Query Expression table.	<pre>UPDATE PSQRYDEFN SET EXPCOUNT = (SELECT COUNT(*) FROM PSQRYEXPR C where oprid = 'x' AND qryname = 'y') where oprid = 'x' AND qryname = 'y'</pre>
QUERY-03	Query Definition Bind count does not match the record count in the Query Bind table.	<pre>UPDATE PSQRYDEFN SET BNDCCOUNT = (SELECT COUNT(*) FROM PSQRYBIND where oprid = 'x' AND qryname = 'y') where oprid = 'x' AND qryname = 'y'</pre>
QUERY-13	Query Criteria Selection-Left does not exist in the Query Selection table.	<p>Run Query and delete the corrupted criteria entry. If you can't open the query, run the following SQL to delete the corrupted criteria entry:</p> <pre>DELETE FROM PSQRYCRITERIA WHERE OPRID = 'X' AND QRYNAME = 'Y' AND CRTNUM = count</pre>
QUERY-23	The listed queries reference non-existent database records.	<p>The query definition is corrupt. Run the following SQL to delete the entire query definition:</p> <pre>DELETE FROM PSQRYDEFN WHERE OPRID = 'X' AND QRYNAME = 'Y'</pre> <pre>DELETE FROM PSQRYSELECT WHERE</pre>

Query	Description	Resolution
		<pre>OPRID = 'X' AND QRYNAME = 'Y' DELETE FROM PSQRYRECORD WHERE OPRID = 'X' AND QRYNAME = 'Y' DELETE FROM PSQRYFIELD WHERE OPRID = 'X' AND QRYNAME = 'Y' DELETE FROM PSQRYCRITERIA WHERE OPRID = 'X' AND QRYNAME = 'Y' DELETE FROM PSQRYEXPR WHERE OPRID = 'X' AND QRYNAME = 'Y' DELETE FROM PSQRYBIND WHERE OPRID = 'X' AND QRYNAME = 'Y'</pre>
QUERY-24	The listed queries were created with the name UNTITLED.	Queries should not be saved as UNTITLED. You must either rename or delete these queries.
QUERY-25	This audit identifies any blank query names.	You must either rename the query or delete the query.
QUERY-26	This audit identifies queries that contain unions but select an unequal number of fields.	Ensure that every select statement in the query has an equal number of fields selected. These fields must also match in display type and length.

Record Integrity

Query	Description	Resolution
RECORD-1	Record Definition Field count does not match the number of records in Record Field table.	<pre>SELECT COUNT(*) FROM PSRECDEFN WHERE RECNAME = 'X'; UPDATE PSRECDEFN SET FIELDSCOUNT = COUNT WHERE RECNAME = 'X';</pre>
RECORD-2	Record Definition Fields do not exist in Record Field table.	<pre>UPDATE PSRECDEFN SET FIELDSCOUNT = 0 WHERE RECNAME = 'X';</pre> <p>Or...</p> <pre>DELETE FROM PSRECDEFN WHERE RECNAME = 'X';</pre>
RECORD-6	Record Field definitions contain record names that do not exist in the Record Definition table.	<pre>DELETE FROM PSRECDEFN WHERE RECNAME = 'X'</pre>
RECORD-13	Temp Records that specify a non-standard SQL table name.	<pre>UPDATE PSRECDEFN SET SQLTABLENAME = ' ' WHERE RECTYPE = 7 AND SQLTABLENAME <> ' '</pre>

Related Language Integrity

Query	Description	Resolution
SYSLANG-01	Base Language Records that are found in the PSRECDEFNLANG table.	<pre>DELETE FROM PSRECDEFNLANG WHERE LANGUAGE_CD = (SELECT B.LANGUAGE_CD FROM PSOPTIONS B)</pre>

Query	Description	Resolution
SYSLANG-02	Base Language Fields that are found in the PSDBFIELDLANG table.	<p>Check the value of LANGUAGE_CD on PSOPTIONS; this is the base language. Entries with this language code are found in PSDBFIELDLANG. Base language entries should only be in PSDBFIELD.</p> <p>After you establish that the base language entries in PSDBFIELD are correct, you delete them from PSDBFIELDLANG as follows:</p> <pre>DELETE FROM PSDBFIELDLANG WHERE LANGUAGE_CD = (SELECT LANGUAGE_CD FROM PSOPTIONS)</pre>
SYSLANG-03	Foreign Language Records that are found in PSRECDEFNLANG table without related Base Records from PSRECDEFN.	<pre>DELETE FROM PSRECDEFNLANG WHERE NOT EXISTS (SELECT 'X' FROM PSRECDEFN B WHERE PSRECDEFNLANG.RECNAME = B.RECNAME) AND PSRECDEFNLANG.LANGUAGE_CD <> (SELECT C.LANGUAGE_CD FROM PSOPTIONS C)</pre>
SYSLANG-04	Foreign Language Fields that are found in the PSDBFIELDLANG table without related Base Fields from PSDBFIELD.	<pre>DELETE FROM PSDBFIELDLANG WHERE NOT EXISTS (SELECT 'X' FROM PSDBFIELD B WHERE PSDBFIELDLANG.FIELDNAME=B.FIELDNAME) AND PSDBFIELDLANG.LANGUAGE_CD <> (SELECT LANGUAGE_CD FROM PSOPTIONS)</pre>
SYSLANG-15	The Following Related Language fields are orphaned.	<p>For each row on the related language record there must be a single row on the base table with matching keys. An orphan row is a row of data on the related language record that does not have a corresponding parent row on the base table. Orphan rows must be deleted.</p> <p>Select against the related language table by using the key fields that are listed in the report to find discrepancies.</p> <p>To fix this problem, using the platform's query tools, select against the related language table, by using the fields that are listed in the report, where the values do not match a row that is on the base table. For every row on the report there is an orphan row on the table. Do a SELECT first to ensure you get the same row count as the report, then delete the selected rows. Here is sample SQL for a Microsoft SQL Server database:</p> <pre>SELECT * FROM PSCONTDEFNLANG A WHERE NOT EXISTS (SELECT 'X' FROM PSCONTDEFN B WHERE A.ALTCONTNUM = B.ALTCONTNUM AND A.CONTNAME = B.CONTNAME AND A.CONTTYPE = B.CONTTYPE)</pre> <pre>DELETE FROM PSCONTDEFNLANG WHERE NOT</pre>

Query	Description	Resolution
		<p>EXISTS</p> <p>(SELECT 'X' FROM PSCONTDEFN B WHERE PSCONTDEFNLANG.ALTCONTNUM = B.ALTCONTNUM AND PSCONTDEFNLANG.CONTNAME = B.CONTNAME AND PSCONTDEFNLANG.CONTTYPE = B.CONTTYPE)</p> <p>For each field name listed:</p> <p>SELECT * FROM <Related Language Record> A WHERE NOT EXISTS (SELECT 'X' FROM <Base Record> B WHERE A.<Field Name> = B.<Field Name>)</p>

SQL Integrity

Query	Description	Resolution
SQL-01	SQL text without a base definition.	<p>Can be fixed with:</p> <pre>DELETE FROM PSSQLTEXTDEFN WHERE SQLID NOT IN (SELECT DISTINCT SQLID FROM PSSQLDEFN)</pre>
SQL-08	View SQL that are not referenced by record or dynamic views.	<pre>DELETE FROM PSSQLDEFN WHERE SQLTYPE = 2 AND SQLID NOT IN (SELECT DISTINCT RECNAME FROM PSRECDEFN WHERE RECTYPE = 5 OR RECTYPE = 1)</pre> <pre>DELETE FROM PSSQLDESCR WHERE SQLTYPE = 2 AND SQLID NOT IN (SELECT DISTINCT RECNAME FROM PSRECDEFN WHERE RECTYPE = 5 OR RECTYPE = 1)</pre> <pre>DELETE FROM PSSQLTEXTDEFN WHERE SQLTYPE = 2 AND SQLID NOT IN (SELECT DISTINCT RECNAME FROM PSRECDEFN WHERE RECTYPE = 5 OR RECTYPE = 1)</pre>

Process Scheduler Integrity

Query	Description	Resolution
PRCSSCHED-08	Process Definitions, where the process category is invalid	For the listed processes, select Process Scheduler, Processes, Process Definition. Correct the Process Category.
PRCSSCHED-09	Job Definitions, where the process category is invalid	For the listed jobs, select Process Scheduler, Jobs, Job Definition. Correct the Process Category.
PRCSSCHED-10	Process Definitions, where the process category is missing	For the listed processes, select Process Scheduler, Processes, Process Definition. Specify a Process Category.

Query	Description	Resolution
PRCSSCHED-11	Job Definitions, where the process category is missing	For the listed jobs, select Process Scheduler, Jobs, Job Definition. Specify a Process Category.
PRCSSCHED-12	Server Categories, where a category defined for a server does not exist in process category definition	For the listed servers, select Process Scheduler, Servers, Server Definition. Remove the invalid Process Category.
PRCSSCHED-13	Server Categories, where a server is missing a process category definition.	For the listed servers, select Process Scheduler, Servers, Server Definition. A warning message appears when you open the page, and the missing Process Category is added to the server when the page is saved.
PRCSSCHED-14	Process Scheduler Queue, where a queued/pending request specifies a category that does not exist in process category definition.	<pre>DELETE FROM PSPRCSQUE S WHERE S.RUNSTATUS IN('5', '16') AND S.SERVERNAMERQST <> '' AND S.PRCSCATEGORY NOT IN (SELECT PRCSCATEGORY FROM PS_SERVERCATEGORY WHERE SERVERNAME=S.SERVERNAMERQST AND MAXCONCURRENT > 0)</pre>
PRCSSCHED-15	Process Definitions, where a process specifies an invalid destination folder.	For the listed processes, select Process Scheduler, Processes, Destination. Correct the Destination Folder or blank it out.
PRCSSCHED-16	Process Definitions, where a process definition specifies a recovery process that does not exist.	For the listed processes, select Process Scheduler, Processes, Process Definition Options. Correct the recovery process or blank it out.
PRCSSCHED-17	Job Definitions, where a job definition specifies a recovery process that does not exist.	For the listed jobs, select Process Scheduler, Jobs, Job Definition Options. Correct the recovery process or blank it out.

See Also

PeopleTools 8.44 PeopleBook: Server Tools, "Data Integrity Tools," Running SYSAUDIT

Changed and Updated Features

This section discusses additional changed features for PeopleTools server tools.

Recycle Count in PSAPPSRV

In PeopleTools 8.44, the default recycle count for production configuration has been increased from 2000 to 5000. This reduces the effective usage of the cached objects that are accumulated through the Application Server process.

Free Text Searching

See [Verity VDK to Version 5.01](#)

Support for IBM HTTP Server

The PeopleSoft system supports IBM HTTP Server 1.3.28 in PeopleTools 8.44. By default, the multi-views feature is disabled.

Trace-Log File Character Set

When you set the trace-log character set value to **UNICODE** using PSADMIN to configure a domain, the Appserver and Process Scheduler processes create log files in Unicode format (UTF-8). All of the log outputs in the LOGS directories are affected by this setting, with the exception of the following:

- RENSrv
- Process Scheduler on OS390/US
- Tuxedo log file

The log files in these outputs are not displayed in Unicode format.

Debugging PeopleCode in Three Tier Mode

When you debug PeopleCode with an application server, PeopleSoft Application Designer (PSIDE) should be run in three-tier mode. PeopleCode debugging using a two-tier PSIDE and an application server is not supported on multihomed (multiple IP address) workstations.

Tuxedo Queue Size

In the chapter titled “Understanding Server Domain Parameters,” the Tuxedo queue size has been added as a new parameter in PSSAPPSRV. This parameter is used mainly for Pub/Sub processing.

Shared Cache

In the chapter titled “PeopleSoft Utilities,” the following note has been added to the section titled Running the Load Cache Program:

Note. When you enable share cache but the SHARE directory is not set up properly, a warning message will be generated in the Application Server log file to alert you that there are no cache files in the cache directory.

AUDIT_ACTN Field Values

In the chapter titled “Database Level Auditing,” the action values returned in the AUDIT_ACTN field have changed as follows:

Old Action Value	New Action Value	Description
I	A	Row inserted.
D	D	Row deleted.
B	K	Row updated, snapshot before update.
A	N	Row updated, snapshot after update.

Reporting Tools and Process Scheduler

Reporting and associated technologies have been enhanced in order to improve overall performance and administration. This reduces the total cost of ownership and increases user efficiency.

This section discusses enhancements and changes in the following areas:

- PeopleSoft Process Scheduler.
- PeopleSoft Tree Manager.
- PeopleSoft Query.
- Crystal Reports for PeopleSoft
- PS/nVision.
- Structured Query Report (SQR) for PeopleSoft.

PeopleSoft Process Scheduler

Both PeopleSoft Process Scheduler and Process Monitor include enhancements in the areas of manageability, usability, and efficiency. The new version of PeopleSoft Process Scheduler intelligently prevents and handles conflict situations and error conditions. Processes can also be managed by available server resources or by functional area to ensure better overall performance. The **Run to Window** feature has been enhanced to provide more information about the progress of each report or process. An improved management interface for administrators provides information about system resource usage and the process queue.

Process Requests

This section discusses additional changed features for PeopleSoft Process Scheduler process requests.

Run Control IDs

Distribution information is now saved with the run control. When you click the Distribution icon, located on the Process Request page, the saved information appears.

Process Status for Output Type of Window

When a report is triggered with an output type of *Window*, the status of the process now appears in the new browser window before displaying the results. The possible states are *Queued*, *Processing*, *Success*, *Error*, and *Warning*.

Maximum Occurrence Value for Process Type of Winword

Each WINWORD instance that is initiated shares the common Winword template NORMAL.DOT. This may cause some instances to encounter the following error message when multiple WINWORD instances are initiated:

```
Word encountered file corruption while opening ...\\Normal.dot. Part  
of this document may be recoverable. Attempt recovery now?
```


The Max Concurrent value for the process type WINWORD should be set to **1** as a precautionary step to prevent this problem.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, "Submitting and Scheduling Process Requests"

Recurrence Definitions

This section discusses additional changed features for PeopleSoft Process Scheduler recurrence definitions.

Use Schedule Date/Time as Start Date/Time Option

The option Use Schedule Date/Time as Start Date/Time enables users to select whether they want recurring processes to run only at the times specified or to run in catch-up mode. For example, this option is used if processes are scheduled after the run time, or if servers are down when the processes should run.

Example 1

A process is scheduled to run daily at 10 a.m. However, the recurrence isn't set up until 2 p.m. If the Use Schedule Date/Time as Start Date/Time option is selected, the process does not run until 10 a.m. the following day. If the option is not selected, the process runs to catch up for the missed 10 a.m. run.

Example 2

A process is scheduled to run hourly every day from 9 a.m. to 3 p.m. The process runs successfully at 9 a.m., and then the server goes down. It is not recovered until 5 p.m. If the Use Schedule Date/Time as Start Date/Time option is selected, the process does not run again until 9:00 a.m. the following day. If the option is not selected, the process runs six times to catch up for the missed runs scheduled for 10 a.m., 11 a.m., noon, 1 p.m., 2 p.m., and 3 p.m.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, "Defining PeopleSoft Process Scheduler Support Information," Defining Recurrence Definitions

Process Definitions

Several new options have been added to the process definition pages to assist in managing processes.

System Constraints

You must configure the system with a master scheduler so that the system can evaluate the settings for the following three options. In the absence of a master scheduler, the system does not use these settings:

Max Concurrent

Specify the maximum number of occurrences of a process, across all PeopleSoft Process Scheduler occurrences, that can be active at one time. The default value is unlimited.

Note. Processes exceeding the maximum appear in Process Monitor with the status *Blocked*. As active occurrences finish, blocked processes are released and scheduled.

Mutually Exclusive Process(es)

Specify processes that must not run at the same time as this process.

Note. Processes failing this constraint appear in Process Monitor with the status *Blocked*. When mutually exclusive processes finish, blocked processes are released and scheduled.

Max. Processing Time

Specify the maximum processing time for this process. If the field is left blank (the default) the value becomes *Unlimited*. The system cancels the process if processing exceeds this time.

Important! This field is not supported for SQR and COBOL process types scheduled on a OS390 operating system, and run from Unix System Services (USS).

Restart Process

The system uses these settings to determine if a process should be automatically restarted:

Restart Enabled

Select to have the system attempt to restart this process if it is marked as *Error*.

Note. The Retry Count field becomes active when this option is selected.

Retry Count

Specify the number of times that the system attempts to restart this process.

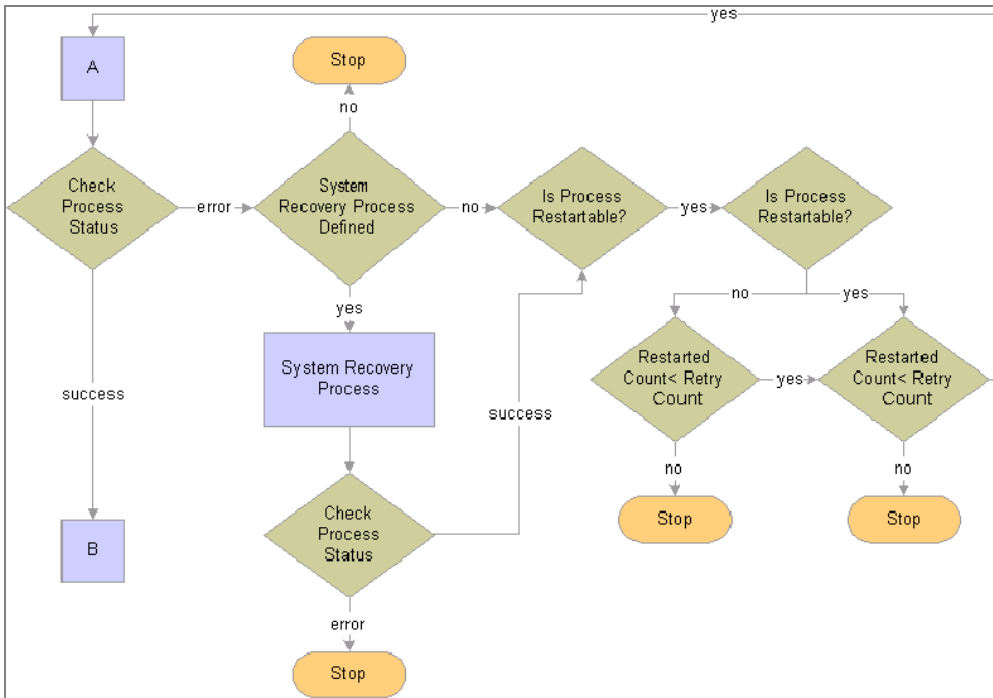
System Recovery Process

Specify an optional process that can be run in case of error.

Note. The original process does not restart until the process identified as the system recovery process has run.

Note. The restart procedure can be set at the job or process level.

This diagram illustrates the restart procedure:



Restart procedure for a process

File Dependency

When a process is scheduled, it waits for a specified file to be found on the operating system. You can specify a timeout setting, and if it is exceeded the process is marked as *Error* and the restart process is initiated.

Processes on hold due to files not found appear in the Process Monitor with the status *Blocked*. When files are located, blocked processes are released and scheduled.

You can view or edit file dependency information on the Process Request page.

Note. A specific PeopleSoft Process Scheduler server must be identified in the process definition for the system to evaluate this option. The load-balancing option is not used for processes that are file-dependent because these processes can only be run on the specified server.

Process Categories

Use process categories to group processes for the purpose of server load-balancing and prioritization. You can select to run jobs or processes belonging to certain process categories on specific servers, and then you can set a priority of high, medium, or low for each category.

For example, you might group manufacturing processes into one category and general ledger (GL) processes into another category. You can then set the priority for your GL category to high so that they always run first.

To use the new process category feature:

1. Define process categories; the default process category is Default.

2. Group process definitions and job definitions into process categories.
3. Assign process categories to servers and prioritize them.

Note. The category *Default* is delivered with the system. If this is the only category available, all process or job definitions are automatically assigned to this category. If additional process categories are created, this field value is blank.

URL Associations

The system enables you to associate multiple URLs with a process definition. The links appear on the Report Detail page, which is accessible from the Process Monitor or Report Manager.

Notifications

Notifications can now be sent to a list of users if a process encounters a warning. Previously, notifications could be sent only when a process encountered an error or ran successfully.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, “Defining PeopleBook Process Scheduler Support Information,” Defining Process Definitions

Job Definitions

Several new options have been added to the job definition pages to assist in managing processes.

Maximum Concurrent Occurrences

The maximum number of occurrences of a job, across all PeopleSoft Process Scheduler instances, that can be active at one time. The default value is ***Unlimited***.

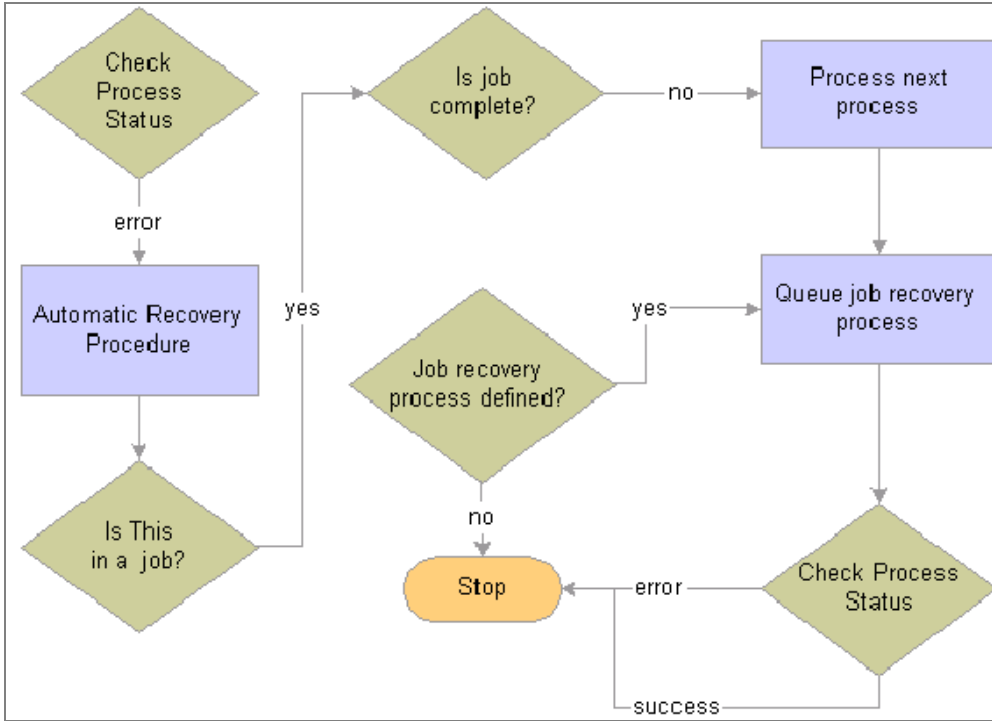
Note. Jobs exceeding the maximum appear in the Process Monitor with a status of *Blocked*. As active occurrences finish, blocked jobs are released and scheduled.

Overriding the Process Retry Count

A new Override Process Retry Count option has been added to the job definition. When the option is enabled, the new Retry Count field becomes active. The number entered in this field overrides the retry count entered for individual processes contained in a job.

Job Recovery Process

You can set up a process to run in case a job moves to error status. This is similar to the recovery procedures for a process, as shown in this diagram:



Restart procedure for a job

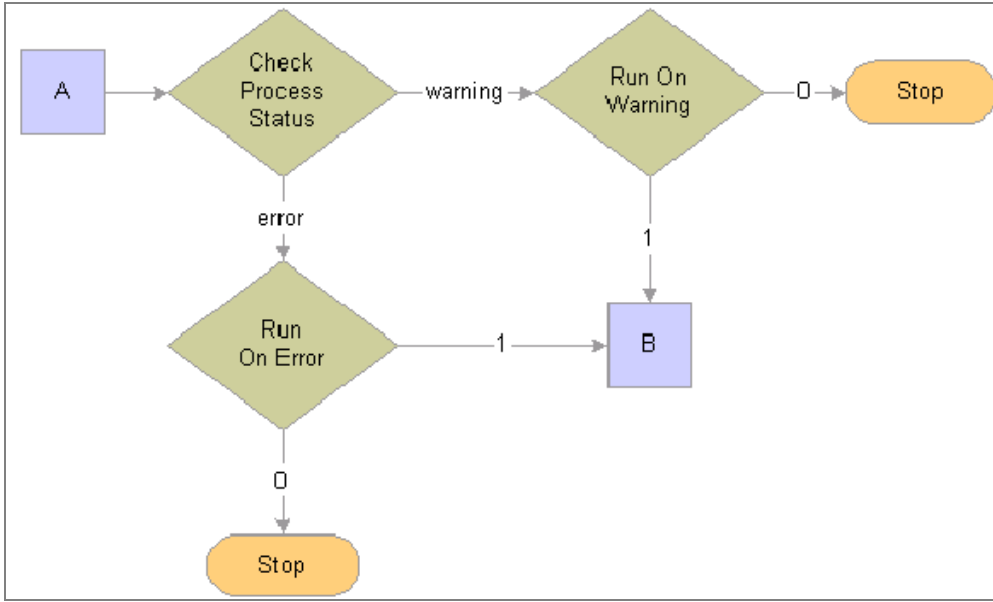
Warning Status

A warning status is available for use in a job definition. A process may exist with an error or a warning status. A job definition may continue or stop on any of these process statuses.

Note. The *Run Always* setting in the process list has been changed to two settings; *Run Always on Error* and *Run Always on Warning*.

Run on Warning	Run on Error	Process Status	Job Status	Next Process Scheduled
0	0	Warning	Warning	No
0	0	Error	Error	No
1	0	Warning	Warning	Yes
1	0	Error	Error	No
1	1	Warning	Warning	Yes
1	1	Error	Error	Yes

This diagram illustrates the procedure for the Run on Error and Run on Warning settings:



Processes (A and B) set to run in serial mode

The warning status must be set using PeopleSoft Application Engine. Set the new AE_APPSTATUS field to **1**.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Application Engine

Run Always on Warning

This setting allows the next process in the queue to run regardless of whether the preceding process had warning status.

Run Always Feature

The Run Always feature works only if the process that is flagged to always run is the next process in the queue after the process that had error or warning status.

Here is an example. Suppose that a serial job contains three processes. The third process in the queue is marked Run Always on Error. If the first process in the queue has error status, the third process does not run because the system determines if the *next* process in the queue is flagged. Because the second process is not flagged Run Always on Error, the job has No Success status.

Job Notifications

Notifications can now be sent to a list of users if a process encounters a warning. Previously, notifications could only be sent when a process encountered an error or ran successfully.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, "Defining Jobs and Jobsets," Creating Job Definitions

Schedule JobSet Definitions

This section discusses additional changed features for PeopleSoft Process Scheduler schedule JobSet definitions.

Using the Run Now Option

The Begin Date and Begin Time fields automatically contain the current date and time. To run the JobSet immediately, leave these fields with their default values, activate the JobSet, and select Save. Do not click the Run Now button, because this also triggers a process request. Use the Run Now button only if the begin date and time values reflect a future date and time, and you also want to the process to run immediately.

Scheduling Recurring JobSets

To avoid duplicating JobSets, you must configure the system with a master scheduler. The task of scheduling JobSets has been removed from a standalone PSPRCRSRV process, and it is now the responsibility of the master scheduler. If a master scheduler is not configured, the recurrence setting is not used.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, "Defining Jobs and JobSets,"
 Defining Scheduled JobSets

Server Definitions

This section discusses additional changed features for PeopleSoft Process Scheduler server definitions.

Defining HTTP Distribution Nodes

Use basic authentication for the web server when configuring the SchedulerTransfer servlet used by the report distribution system. See the install guide for more details.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, "Setting Server Definitions"

Process Monitor Process List

Several changes have been made to enhance the Process List page in the Process Monitor.

Understanding Statuses of Process and Job Requests

The status column is now two columns: Run Status and Distribution Status. The Run Status column indicates the current state of a process or job. The following table shows the valid states:

Run Status	Description
Blocked	Indicates that the running of this process has been blocked. This indicates that this process is waiting for the number of active occurrences to drop below the maximum concurrent value, it is waiting for a process recognized as mutually exclusive to finish, or a dependent file must be located.

Cancel	Indicates that a user has requested to cancel the scheduling of a process request.
Cancelled	Indicates that the server agent has successfully canceled the request after it has started.
Error	Indicates that the program that is associated with the process request encountered an error while processing transactions within the program. In this case, delivered programs are coded to update the run status to Error before terminating.
Hold	Indicates that a user has requested the scheduling of a process request be put on hold.
Initiated	Indicates that a PeopleSoft Process Scheduler server has acknowledged the new request. At this time, PeopleSoft Process Scheduler validates the parameters that are associated with this request and submits the command line to start the process.
No Success	Indicates that the program encountered an error within the transaction. The status No Success is different from Error because the process is marked as restartable. Application Engine is the only delivered process type that is restartable.
Pending	Indicates that an item is a new PSJob request. This indicates that this item is waiting for a previous item in the job before PeopleSoft Process Scheduler releases this item. When the previous item has run successfully, PeopleSoft Process Scheduler changes the status of item to Queued.
Processing	Indicates that PeopleSoft Process Scheduler has successfully initiated the program. The status Processing indicates that the program is running.
Queued	Indicates a new process request. The process request remains in Queued status until a PeopleSoft Process Scheduler Server picks up the new request.
Restart	Indicates that a process that encountered an error is attempting to restart.
Success	Indicates that the program has successfully run.
Warning	Indicates a warning in a job definition. A job definition may continue or stop when a process encounters a warning. The warning status must be set using PeopleSoft Application Engine. Set the AE_APPSTATUS field to 1.

The Distribution Status field displays the distribution status for each process and job. Valid states are *N/A*, *None*, *Processing*, *Generated*, *Not Posted*, *Posting*, and *Posted*.


Selecting and Deselecting Process and Job Requests

The Select All and Deselect All buttons appear at the bottom of the page only when the process list contains processes that can be deleted, canceled, or held.


Use the check box displayed to the left of each process to select individual processes. The check box is active for valid processes only.

Note. The *Delete*, *Cancel*, and *Hold* options can be performed only on processes with specific run statuses. Therefore, the options are visible only when processes are filtered by a valid run status for the options.

Managing Recurring Processes

The  button indicates recurring processes. Click the button to access the Recurring Process/Job page where you can Hold, Stop, or Restart the next occurrence. This page displays the recurrence name, process type, and process name of the selected recurring process. A history of the recurrence process is also listed. The most current instance is listed first.

Managing Scheduled JobSets

The  button indicates scheduled jobsets. Click the button to access the Schedule JobSet page. This page displays a history of the scheduled jobset.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, "Using Process Monitor"

Process Monitor Server List

This section discusses additional changed features for PeopleSoft Process Scheduler process monitor server lists.

CPU and Memory Thresholds

You can now set CPU and memory thresholds for each server. If either the amount of CPU or memory used exceeds the percentage value thresholds entered, the scheduler's status changes to *Overload* and it will wait to launch any new processes.

The Process Monitor - Server List page displays the current CPU and memory availability as well as the threshold values entered. These values are based on the PeopleSoft Process Scheduler server agent sleep time.

Master Scheduler and Load-Balancing Information

The Server List page of the Process Monitor now includes a column named Master. If the selected server is designated as a master scheduler, the value in this column is **Y**. The Server Detail page now shows the Server Load Balancing Option value.

Active Processes

The Server List page of the Process Monitor now includes a column named Active, which shows the number of active processes. This value is updated based on the PeopleSoft Process Scheduler server agent sleep time.

Clicking the server name displays the following activity information by process type and by process category:

- Priority.
- Maximum concurrent.
- Active.

Server Details Page

The following information has been added to the Server Details page:

- Server load-balancing option value.
- CPU threshold and CPU usage.
- Memory threshold and memory usage.
- Disk space threshold and disk space availability.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, “Using Process Monitor.”

Report Manager

This section discusses additional changed features for PeopleSoft Process Scheduler report manager.

Viewing Reports

The *View* link is no longer available on the Administration page. To view a report, you can either click the description of the desired report, or click the *Details* link and then click the report file name.

Deleting Reports

Select All and Deselect All buttons now appear at the bottom of the Administration page. Click the Select All button to select all the reports listed. Click Deselect All to clear the selection. To select specific reports, select the appropriate check boxes. When you have made your selection, click the Delete button to delete the selected reports.

Using the Message Log Page

The Report Detail page now includes a link to the Message Log page. Previously, this page was only available from the Process Monitor.

Use the Message Log page to view messages that are inserted into the message log by the programs that are running. Click the Explain button to display a detailed explanation of the message for Application Engine and COBOL processes.

Accessing Previously Run Reports (New User or New to a Role)

Report folders located on the Explorer page and the List page are populated through the report folder table, which is keyed by user ID. When users are added to the security role table, the information does not automatically transfer to the report folder table for existing reports. Therefore, when a user is added to a role, or is newly hired, the user cannot access previously run reports using the List or Explorer page.

Note. To distribute previously run reports to the List page and the Explorer page, you must rerun them.

Changes to the Purge Process

When you use the System Purge tab in the system settings to have PeopleSoft Process Scheduler perform a periodic purge, it now triggers the Application Engine program PRCSYSPURGE. This program purges both the Process Request table and the Report Manager table. As part of the Report Manager cleanup, it also purges the reports from the Report Repository table and archives the data into the Report Archive table.

If multiple PeopleSoft Process Scheduler instances are running against the same database, and each has its own Report Repository table, PRCSYSPURGE is initially responsible for the purge process. It removes all entries from the PS_CDM_LIST table and then purges all reports that match its server name or report node from its report repository. The PRCSYSPURGE program then inserts entries to the PS_CDM_LIST_PURGE table where neither the server name nor the report node name matches. If the PRCSYSPURGE program detects that more than one Process Scheduler instance is active, it schedules the Application Engine program PRCSRVCN to run on all the other active Process Scheduler servers. The PRCSRVCN program checks if the server uses its own Report Repository table. If so, the program deletes reports from the report repository used by the server.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, "Using Report Manager"

Report Repository

This section discusses additional changed features for PeopleSoft Process Scheduler Report Repository.

Deleting the Subdirectory

The subdirectory, created by the Process Scheduler server to store all logs and reports generated by the initiated process, is deleted when the output destination type is **Web** and the files are successfully posted to the report repository.

For output destination types other than **Web**, the subdirectory is deleted during the purging when the process request associated with the subdirectory is deleted from the Process Request table.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, "Appendix B: Understanding Logging Systems"

OS390 Process Schedulers and Languages Containing Special Characters

Previously, if the report output contained characters outside the EBCDIC invariant character set (such as accented characters required for Western European languages) and PeopleSoft Process Scheduler was running on OS390, you needed to use HTTP to transfer reports to the repository because the File Transfer Protocol (FTP) transfer option did not correctly transfer report output containing those characters. This problem has now been fixed.

Securing Report Repository for HTTP Documentation

The appendix named "Securing Report Repository for HTTP" has been removed from *PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler*.

See the appendix “Securing Report Repository for HTTP” in the installation guide for your database platform.

PSADMIN Utility

This section discusses additional changed features for PeopleSoft Process Scheduler PSADMIN utility.

Status of a Process Scheduler Server

In the PSADMIN utility, the Show Status of a Process Scheduler Server option has been enhanced to include the following distribution agent queue information:

Name	Description
Program Name	Name of the distribution agent program (for example, PSDSTSRV.EXE).
Queue Name	The queue name (for example, DSTQ).
# Serve	Number of server instances.
# Queued	Number of report requests queued.
Ave Len	Average length of the queue.
Machine Name	Name of the machine where the distribution agent is located.

To display the distribution agent queue information:

1. Select Start, Command Prompt.
2. Change the directory to <PS_HOME>\appserv\
3. Enter psadmin.
4. Press Enter.

The PeopleSoft Server Administration menu appears.

5. Select option 8 (Show Status of a Process Scheduler Server).
6. Select the desired database.
7. Press Enter.

Status information appears.

Dismiss Dialog Option for PS/nVision

A new Dismiss Dialog option has been added to the nVision section of the PeopleSoft Process Scheduler configuration file. The default is *Disabled*. If you have problems with unattended dialogs that are generated from PS/nVision in batch mode, you need to change the setting to *Enabled*.

Parameter	Description
EnablePollDialogs	Using PS/nVision on the web. Indicate whether you want the system to poll and automatically kill unattended dialogs generated from PS/nVision in batch mode. For example, dialog messages from Excel displaying on the webserver. 1 = Enable poll dialogs. 0 = Disable poll dialogs. (Default)
PollDialogSeconds	Enter the time, in seconds, used to cycle polling for the dialog.

Trace Level Option for PS/nVision

A new Trace Level option has been added to the nVision section of the PeopleSoft Process Scheduler configuration file. This new option enables web users to indicate whether they want the system to generate nVision-specific trace and log files. The user can also choose the level of tracing required. Each entry found in the trace files contains a timestamp, which assists in analyzing time spent on function calls. Other information can be used for troubleshooting and debugging purposes.

Trace files are transferred to the report repository by PeopleSoft Process Scheduler after an nVision report has run to completion. They are secured by the same user list as the report. Trace files can be viewed from the View Log/Trace Files page in the Process Monitor. Click the nVision Trace File link.

Note. Extensive tracing can impair performance. Therefore, tracing is disabled by default.

Parameter	Description
TraceLevel	Using PS/nVision on the web. Indicate whether you want the system to generate independent trace/log files, and at what level, for each nVision process. Trace files can be viewed from the Process Monitor Details - View Log/Trace page. 0 = Disable trace files. (Default) 1 = Generate basic high-level information. 2 = Generate level 1 tracing plus high-level code flow. 3 = Generate level 2 tracing plus SQL statements. 4 = Generate level 3 tracing plus most function calls and output values. Note. Extensive tracing will impact performance.

Trace Section: TraceSQL Update

The TraceSQL 1024 bit is now used to enable the tracing of diagnostic messages returned by the DB2/390 %UpdateStats() command.

RemoteCall Section: RCCBL Redirect

Previously, when an Application Engine program running under PeopleSoft Process Scheduler made remote COBOL calls, .out and .err files were always generated in the log output directory for each remote call. This happened regardless of the setting of the RCCBL Redirect option in the Process Scheduler configuration file. This problem has now been fixed. If the .out or .err files are desired, the RCCBL Redirect option must be set to the value **1**.

PSTools Section: Proxy Host and Proxy Port Update

The descriptions for Proxy Host and Proxy have been updated with the following information:

Parameter	Description
Proxy Host	<p>The distribution agent uses this setting if your architecture includes a firewall between the Process Scheduler server and the report repository (web server).</p> <p>Note. If your architecture includes a firewall between the Process Scheduler server and the report repository (web server), the distribution agent needs to tunnel through this firewall through a proxy server to transfer reports successfully. Set this value to the domain name of the proxy server only if your architecture includes a firewall between the Process Scheduler and the report repository (web server). The firewall should be configured to allow outgoing HTTP or TCP connections to originate only from the proxy server host. The proxy server can be configured to restrict access to only the PeopleSoft system and perform tasks such as logging HTTP activity.</p>
Proxy Port	<p>If PeopleSoft Process Scheduler is behind a proxy server, set this value to the port of the proxy server.</p>

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, “Appendix D: Using the PSADMIN Utility”

Max Concurrent Value

The following note has been inserted in the chapter titled “Setting Server Definition,” in the section “Process Types run on this Server”:

Important! Do not use the Max Concurrent field on the Server Definition page to specify the maximum number of concurrent processes for a PSJOB. To configure the maximum concurrent parameter for any given job, use the Max Concurrent field on the Job Definition page.

PeopleSoft Tree Manager

PeopleTools 8.44 provides the following enhancements for PeopleSoft Tree Manager:

- Easier use and management of trees.
- Improved tree usability.

- New functionality to prevent tree maintenance conflicts caused by multiple users modifying the same tree.
- Improved performance of saving trees.

Running PeopleSoft Tree Manager on Macintosh Systems

When running PeopleSoft Tree Manager on the Macintosh operating system, use Netscape Navigator version 6 (NN6) or later.

See “*Troubleshooting Browser Limitations*” on Customer Connection. (www.peoplesoft.com, Customer Connection, Support, Documentation, Documentation Updates, PeopleTools, Browsers)

Copying a Tree to an Earlier Effective Date

Previously, nodes and leaves could lose their descriptions when users attempted to use the Save As or Copy command on a tree for an effective date earlier than the current tree’s effective date. This was because the descriptions could have been entered after the effective date of the new tree. The users now receive a warning.

Dragging and Dropping in Netscape Browser

With the release of PeopleSoft Tree Manager 8.44, when users drag objects beyond the visible area of the Netscape browser window, the browser automatically scrolls, allowing the user to view the appropriate node or leaf on which to drop the object.

Using the New Multiuser Environment

PeopleSoft Tree Manager 8.44 allows multiple users to work in the same environment and on the same tree or branch without the risk of losing individual work due to saving conflicts.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Tree Manager, “Introduction to Tree Manager,” Working with the Multiuser Environment

Using Enhancements to Tree Audit and Repair Programs

The tree audit programs can now be set up as a recurring process to automatically run against the most current version of a single tree or multiple trees.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Tree Manager, “Auditing and Repairing Trees”

Dragging and Dropping as a Sibling

In previous versions of PeopleSoft Tree Manager, when you dragged and dropped a tree node, it always became a child of the node on which it was dropped. With PeopleSoft Tree Manager 8.44, you can drag and drop a node as a child or a sibling.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Tree Manager, "Using Tree Manager," Using Drag and Drop

Receiving Save Warning Messages

In PeopleSoft Tree Manager 8.44, if you modify a tree and then click any link to navigate outside of Tree Manager, you receive a warning to save your changes or else they will be lost.

Improved Presentation of PeopleSoft Tree Manager

In the 8.44 version of PeopleSoft Tree Manager, more appropriate labels appear on many pages of PeopleSoft Tree Manager and tree elements are easier to read. Both of these enhancements increase the usability experience for customers.

Using Trees in PeopleSoft Reporting

Do not create trees that contain a combination of dynamic details and range details if the tree is used by PeopleSoft Query or PS/nVision. Trees with this combination of details can yield incorrect results when used with those reporting tools.

Using Breadcrumbs in PeopleSoft Tree Manager

Breadcrumbs in PeopleSoft Tree Manager provide different information than breadcrumbs in other PeopleTools applications. In PeopleSoft Tree Manager, breadcrumbs show the parent-child relationships between the currently selected object and its parents; they do not show the navigation that you have taken through the tree. Enhanced and changed algorithm of breadcrumbs generation for parent branches.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Tree Manager, "Using Tree Manager," Navigating Tree Manager, Using Breadcrumbs

Tuning the Performance of Audit (Primarily for Informix Platforms)

If the system runs on the Informix database platform, sometimes you may notice that it requires an inordinate amount of time to complete the overlapping detail ranges audit. If that is the case, a database administrator can edit the audit's PeopleSoft SQL object to tune the performance of the audit.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Tree Manager, "Creating Trees," Performing Audits, Tuning the Performance of the Overlapping Detail Ranges Audit

Exporting Trees Using Tree Mover

When you export a tree, the data is saved in the codepage of the server (for example, CP1252 Western European on English Windows, or CP932 Shift-JIS on Japanese Windows). Any characters that are not valid in the server's codepage are converted into question mark characters.

Removed restrictions to export/import Query Access Group Trees and Summary Trees Using TreeMover

PeopleTools 8.44 has enhanced PeopleSoft Tree Manager, enabling TreeMover to export/import all types of trees.

System Requirements for Running PeopleSoft Tree Manager on Macintosh

You must adhere to one of the following system requirements for running the 8.44 version of PeopleSoft Tree Manager on the Macintosh platform:

- Netscape Navigator version 6 (NN6) or higher.
- Safari 1.0 or higher.

PeopleSoft Query

Query Manager has been enhanced provide better control over queries. This improves overall system performance and reduces administration overhead. Administrators can use the new **Query Administration** component as their single point of interaction with queries. It provides them with improved visibility and control over the query activity occurring in their environment. Administrators can view statistics related to both currently running and previously run queries; they can also control query ownership, determine whether queries can be run, and specify the length of time that queries can be run. Query Administration also enables you to stop a currently running query that may be affecting system performance.

All users can benefit from the **new query searching capabilities**, and they can store frequently used queries in a **Favorites list**. In addition, the new version of PeopleSoft Query now supports **queries run directly to a Microsoft Excel spreadsheet**, **criteria reordering**, **drillable links in query results**, and **left outer joins**, all of which improve usability and operator efficiency.

Reordering Criteria

To reorder the criteria for a query in previous versions, you needed to delete all criteria and redefine the criteria in the desired order. In PeopleTools 8.44, simply click the Reorder Criteria button on the Criteria page and enter the desired order.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Query, "Defining Criteria," Entering Selection Criteria

Using URLs in Query Results

With the release of PeopleSoft Query 8.44, you can click URLs in query results and automatically access an associated web page. To enable the links, URLs must begin with one of the following:

- http://
- https://
- ftp://
- file://
- mailto:

- news:
- \\\

Selecting In Tree and Not In Tree Criteria Values

In previous versions of PeopleSoft Query, when using the In Tree and Not in Tree comparison operators, you needed to scroll through lists of trees to select the desired values. With the release of PeopleSoft Query 8.44, you can select values using standard search functionality. This enhancement significantly reduces the amount of time required to select these values.

Using New and Enhanced Searching Capabilities

With the release of PeopleSoft Query 8.44, you can search for queries and records by using the either the enhanced Basic Search function or the new Advanced Search function. Advanced searches enable you to narrow your search by entering search strings for any or all search criteria.

For queries, both basic and advanced searches enable you to perform searches using the following search criteria:

- Access group name
- Description
- Folder name
- Owner
- Query name
- Type
- Uses field name
- Uses record name

For records, both basic and advanced searches enable you to perform searches using the following search criteria:

- Record name.
- Description.
- Access group name.
- Name of field included in the record.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Query, “Modifying and Scheduling Queries,” Opening an Existing Query

PeopleTools 8.44 PeopleBook: PeopleSoft Query, “Creating and Running Simple Queries,” Selecting Records

Using the My Favorite Queries List

You can also store you most frequently used queries in the My Favorite Queries list.

See Also

PeopleTools 8.44 PeopleBook: Modifying, Scheduling and Organizing Queries, “Organizing Queries,” Adding Queries to the My Favorites Queries List

Using the New Query Administration Component

With the release of PeopleSoft Query 8.44, the Query Monitor feature has been renamed to the Query Administration component, which also includes the following new features:

- Query timeout.

When enabled on the new Settings page, this feature terminates the currently running query if it runs beyond the timeout value specified. The timeout values are stored in each permission list.

- New Admin (administration) page predefined searches.

The new Admin page of the Query Administration component now includes the following new predefined searches:

- Queries that belong to locked out accounts.
- Queries that have been disabled.
- Queries that have been run in the last (n) days.

- New Admin page query statistics.

The new Admin page of the Query Administration component now includes the following new query statistics in search results:

- Logging status.
- Disabled status.

- New Admin page features.

Administrators can now perform the following new actions on the Admin page:

- Assign a new owner to a query.
- Delete the query.
- Rename the query.
- Move the selected query to a folder.
- Clear the statistics and logs for the selected query.

- New Executing page predefined searches.

The new Executing page of the Query Administration component now includes the following new predefined searches:

- Queries that have been running longer than (n) minutes.
- Top (n) queries by longest run time.
- New Executing page query statistics.

The new Executing page of the Query Administration component now includes the following new query statistics in search results:

- User ID.
- Owner ID.
- Query name.
- Domain ID.
- Process identifier.
- Host.
- Machine name.
- Status.
- Time started.
- Timeout end time.
- Number of times killed.
- Logging status.
- Disabled status.
- New Executing page features.

The Query Administration component now includes a new Executing page, which enables you to:

- Enable and disable queries.
- Enable and disable logging.
- Terminate currently running queries.

See Also

PeopleTools 8.44 Query PeopleBook: PeopleSoft Query, "Query Administration"

Using the New Archive Query Type

If you have access to workflow queries, you can save queries as the new Archive query type. These queries are generally used only by PeopleSoft Data Archive Manager.

Downloading Queries Directly to Microsoft Excel

Run a query directly to a Microsoft Excel spreadsheet instead of first downloading to HTML and then converting the HTML version to Excel.

See Also

PeopleTools 8.44 Query PeopleBook: PeopleSoft Query, “Creating and Running Simple Queries,” Downloading Queries

Downloading Queries to a Browser

If you use the Windows NT or Windows 2000 or Macintosh operating systems, you can set your downloaded queries to open in browser windows instead of in the Microsoft Excel application. To set this in Windows, select the XLS file type in the folder options and select the check box labeled *Browse in same window*. When this check box is cleared, downloaded queries open in the Microsoft Excel application.

Guidelines for Adding Formulas to Queries in Excel

The documentation for PeopleSoft Query 8.44 provides new guidelines on adding formulas to newly-inserted columns after downloading queries to Excel.

See Also

PeopleTools 8.44 Query PeopleBook: PeopleSoft Query, “Creating and Running Simple Queries,” Downloading Queries

Maximum Number of Rows in Microsoft Excel

Microsoft Excel spreadsheets can contain a maximum number of 65,536 rows. If the spreadsheet cannot include all of the rows in a query, then the first row displays (in red text) the total number of rows of the query that are included in the spreadsheet.

Using Support for Left Outer Joins

You can easily create left outer joins using the Left Outer Join feature in PeopleSoft Query.

Note. Left outer join support is not available for the Oracle 8 platform.

See Also

PeopleTools 8.44 Query PeopleBook: Working With Advanced Query Options, “Joining Records,” Creating Left Outer Joins

Crystal Reports for PeopleSoft

Instead of Crystal Reports 8.5 for PeopleSoft, Crystal Reports 9 for PeopleSoft will be shipped with PeopleTools 8.44. This new version offers several enhancements, such as a **greater number of concurrent server processes**, **full Unicode support**, and **more localized versions** (including Spanish). Customers using Crystal Reports 9 for PeopleSoft will not need to modify any existing reports but will need to run a one-time conversion program to update the database driver information stored in their Crystal Reports files.

Note. Customers using Lotus 1-2-3 (.wks) files should be aware that the .wks format is not supported by Crystal Reports for PeopleSoft 9.

Other significant enhancements include:

- **Custom templates** that enable formatting rules to be externalized and used across reports.
Templates can be used to apply a corporate style to all delivered Crystal reports.
- **Improved export to Microsoft Excel** with a more accurate report representation.
- **Component reuse** for faster report design across reports.
- **Custom functions** that enable you to create custom calculations using the formula editor.
After you create a custom function to you can then use it across reports.

PeopleTools 8.44 Delivered with Crystal Reports 9

This section contains information related to the upgrade to Crystal Reports 9.0.

Crystal Reports 9.0

The PeopleTools 8.44 suite is delivered with Crystal Reports 9, which includes many new and enhanced features. Customers using Crystal Reports must upgrade to the supplied Crystal Reports for PeopleSoft version 9.

Problems with Crystal 9 Reports in PDF Format

In some cases the PDF output produces extra pages containing column or page headings.

To resolve extra pages in PDF output:

1. Open the report in Crystal Reports 9.0.
2. In the Design tab, change the zoom to 25%.
3. If you notice any fields outside of the report layout:
 - a. Choose Format, Auto-Arrange Report to bring those fields into the report layout.
 - b. Rearrange/remove the fields to achieve the desired report layout.

See Also

The Crystal Reports documentation or
<http://www.crystaldecisions.com/products/crystalreports/default.asp>

Error Due to Oracle Connectivity Software

Administrators should note that Oracle connectivity software installs an old version of a Crystal Reports DLL, causing the following error when running reports through PeopleSoft Process Scheduler:

```
Invalid export DLL or export.
```

When this occurs, you should delete the following: <windows>\system32\U2ddisk.dll.

See Also

<http://support.crystaldecisions.com/search/default.asp> (enter *c2001844* in the Search For field)

Unicode Support

PeopleSoft Process Scheduler passes parameters to PSCRRUN (the process that executes the reports) as command line arguments. For this reason, the text of any prompt values is limited to the code page of the operating system. However, because Crystal 9 supports Unicode internally, any Unicode data coming from fields in the database or labels within the report files is supported, regardless of the codepage of the operating system.

Export of Crystal Reports

Crystal 9 exports reports as Microsoft Word documents using the rich text format (RTF). This format more closely matches reports as they are seen in the Crystal application. RTF file sizes can be as much as five times larger than the file size of the previous binary format used in Crystal 8.5.

Large HTML file Output with Microsoft Internet Explorer

Very large HTML files (over 4 MB) can be displayed incorrectly in Internet Explorer because of a browser limitation. To overcome this limitation, use the Separated Pages option when running reports to this format in PeopleSoft Internet Architecture. You can set this option by adding the switch *-SP1* to the command line arguments of the report's process definition.

See *"Troubleshooting Browser Limitations"* on Customer Connection. (www.peoplesoft.com, Customer Connection, Support, Documentation, Documentation Updates, PeopleTools, Browsers)

Numeric Fields with Borders in HTML Output

If reports contain numeric fields that are formatted to have single or double line borders at the top of the container, you may experience incorrect justification of numbers in the HTML output. To resolve this issue, perform one of the following tasks to provide the same effect as using single or double line borders above numeric fields:

- Draw lines above the numeric fields using the line-drawing tool.
- Insert summary fields into a blank text object, and then format the container text object to include borders above the text.

Configuration of Crystal Reports for Multilingual Environments

The PeopleSoft system enables you to use a single Crystal Report server for all languages. The following features support this ability:

- Unicode support.

Crystal Reports for PeopleSoft 9 supports Unicode.

- Locale formatting.

Locale formatting is based on the personalizations of the user scheduling the report, and it is not based on the formatting set on the report server. If you do not want locale formatting to be based on the personalizations of the user scheduling the report (for example, if you want to preserve the date or time formatting that is hard-coded in the report file) use the *-LX0* parameter to disable locale processing.

- PStoWords function.

The ToWords function (used in printing checks) is supplemented by PStoWords, which can support any PeopleSoft system language instead of only the language of the installed version of Crystal Reports.

See Also

PeopleTools 8.44 PeopleBook: Crystal Reports for PeopleSoft, "Using Crystal Reports," Working with Multiple Languages, Understanding Crystal Reports Designer/Runtime Language Versions

New Documentation Describing the Process of Searching for Translated Reports

PeopleTools 8.44 PeopleBook: Crystal Reports for PeopleSoft now includes documentation describing Crystal's process of searching for translated reports.

See Also

PeopleTools 8.44 PeopleBook: Crystal Reports for PeopleSoft, "Using Crystal Reports," Working with Multiple Languages, Understanding the Process of Searching for Translated Reports

PSODBC DSN Login Using a Blank User ID

When creating a new report, if you log into PeopleTools through Crystal using the PeopleSoft login dialog, you may encounter a problem if the PeopleSoft PeopleTools data source name (DSN) has a blank user ID. When this is the case, the list of available queries appears below an extra incorrect hierarchy, preventing you from importing the appropriate queries into Crystal. To work around this issue, perform one of the following tasks:

- Enter a user ID into the PeopleSoft PeopleTools DSN.
- When selecting a data source to create a new report, use the Crystal login user interface by clicking Next (instead of Finish).

Paper Size Setting for Printing Crystal Reports

To set the paper size for printing reports, you must set one of the following arguments in the process definition:

- -PAPERLG
Print Crystal reports using legal sized paper.
- -PAPERLT
Print Crystal reports using letter sized paper.

Note. This flag is the default for printer paper size.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Process Scheduler, “Defining PeopleSoft Process Scheduler Support Information,” Defining Process Type Definitions, Entering Global Definitions for Processes, Crystal Process Type Definitions

PeopleSoft Database Login

Depending on your database platform, the process for logging into the PeopleSoft database has changed when creating new reports.

See Also

PeopleTools 8.44 PeopleBook: Crystal Reports for PeopleSoft, “Using Crystal Reports,” Creating and Formatting Crystal Reports, Creating Crystal Reports

Exporting the AP Open Liability Report (APY1406) to Excel

If you use Process Scheduler run the AP Open Liability report (APY1406) and select the File/XLS option, the totals will not align with the detail columns that the totals represent.

You can modify the APY1406 report – or other reports that have this alignment issue – to export to Excel properly by following the guidelines provided in Crystal Decisions’ document *Exporting to Microsoft Excel*.

To download this documentation, navigate to www.crystaldecisions.com, then search for the string *Exporting to Microsoft Excel*. Then download the `scr_exportexcel.pdf` file

See Also

http://support.crystaldecisions.com/communityCS/TechnicalPapers/scr_exportexcel.pdf

Running the APY6011 Report Through Process Scheduler

At this time you cannot run the Crystal 8.5 version of the APY6011 report through Process Scheduler using PeopleTools 8.44 and Crystal 9. PeopleSoft has created a new Crystal 9 version of this report which you *can* run through Process Scheduler using PeopleTools 8.44 and Crystal 9.

PS/nVision

Stability, reliability, and administration have all been improved in PS/nVision. The following features have been added to prevent deadlocks and system errors:

- ***Automatic restarting of large nVision reports*** if a problem occurs during their execution.
- ***Improved clean-up after errors.***
- ***Improved system visibility during an nVision report run.***

Additionally, the new version of PS/nVision includes ***enhanced security*** to ensure that casual users cannot modify the rules for running production reports.

Increased Robustness and Stability

PS/nVision has been enhanced to provide greater robustness and stability. You can now run multiple concurrent nVision processes that access the same layout in batch mode.

PS/nVision and Windows NT scheduler now look for PS/nVision Excel deadlocks and resolve them. This is accomplished by better identification of resource usage so unavailable resources do not deadlock other processes. In the case of an error, nVision will exit and kill the associated Excel process. The Process Scheduler will also test for hanging processes and kill them based on the configured timeout settings.

Process Scheduler can now cancel nVision processes based on a user-configurable timeout setting, and can also be configured to restart and retry processes that have exited before completion. NVision will pick up restarted report requests and reports with scope with the last report or scope value previously run and will not repeat reports in a report request or scope values that have been processed successfully. These restart/retry options are defined in Process Scheduler setup pages.

Configurable Tracing

Configurable tracing has been added to allow nVision users to show the process flow when running an nVision report. This tracing is set in the nVision section of the Process Scheduler configuration file. nVision tracing will also provide status about the time to process a report, the success status, and the number of instances produced in reports with scope. Tracing logs are accessible from the Process Monitor Details page.

Five tracing levels are supported: 0, 1, 2, 3, and 4. The following table shows the level of tracing for each value:

Tracing Level	Description
0	No tracing; no log files are generated. This is the default setting.
1	<p>The lowest level of tracing. With this setting, nVision generates basic, high-level process flow and status information. This setting can be used to check whether nVision was launched successfully and whether it is able to connect to Microsoft Excel and process requests. Some of the key entries in Level 1 settings are: Command Line arguments, Trace Level, Excel Process ID, Run Control Name,</p> <p>Report Name, Business Unit, Drill Layout, and Instance Name.</p> <p>A common scenario for which to use this level is if a PS/nVision process exits immediately after processing.</p>
2	This level contains entries from level 1 plus additional information. A high-level code flow is recorded with this setting.
3	This level includes tracing up to level 2 and SQL statements. For Microsoft Windows, PS/nVision runtime SQL can be displayed by selecting the Show Report SQL option from Menu, nVision, Options. The same SQL statements will be written into the log file by changing the trace level to 3.
4	This level is the highest and includes tracing up to level 3 plus additional function calls, output values, and other detail information. This setting can be used for identifying intermittent problems and random behaviors.

See also

PeopleSoft 8.44 PeopleBook: PS/nVision, "Advanced PS/nVision Options," Setting Trace Files

Detection of Unattended Dialog Boxes

The configurable features EnablePollDialogs and PollDialogSeconds have been added to allow detection of unattended dialog boxes displayed by the nVision or Excel processes during batch mode and dismiss them. You can determine whether to use this feature and how often to check for dialog boxes. This feature is set in the nVision section of the Process Scheduler configuration file.

See also

PeopleSoft 8.44 PeopleBook: PS/nVision, "Advanced PS/nVision Options," Dismissing Unattended Dialogs

Secure Report Requests

In previous versions, nVision report requests were public, allowing everyone to run or modify them. In this release, report requests are private by default when they are created. Users can share report requests with users or roles they select. Each request has an access mode on the Report Request page, allowing public or secured access to the report requests.

nVision Report Request		Advanced Options	
Business Unit:	QEBU1	Report ID:	EMPLOYEE
			Copy to Another Business Unit / Clone
			Delete This Report Request
Report Title:	<input type="text" value="Employee Info"/>		Transfer to Report Books
			Process Monitor
*Layout:	<input type="text" value="employee"/>		Report Manager
			Share This Report Request
▼ Report Date Selection			
*As Of Reporting Date:	<input type="text" value="Specify"/>	<input type="text" value="12/31/2000"/>	<input type="button" value="BT"/>
*Tree As Of Date:	<input type="text" value="Use As Of Reporting Date"/>		
▼ Output Options			
*Type:	<input type="text" value="File"/>		Scope and Delivery Templates
Format:	<input type="text" value="Microsoft Excel Files (.xls)"/>		
	<input type="button" value="Run Report"/>		

nVision Report Request page

In secured mode, each report request will have user IDs and roles associated with it, and only the users in that access list can view or modify it. Public report requests can still be viewed or modified by any user. Reports can be copied or cloned to other Business Units, retaining the same access mode as the original report. In Report Books, users can access report requests in Public mode and those with access lists containing their user IDs or roles.

nVision Share Report Request

Business Unit: QEBU1 **Report ID:** EMPLOYEE

Last Update User ID: VP1

08/25/03 1:19:02PM

Access Mode

Public Secured

Report Request shared with: [Customize](#) | [Find](#) | [View All](#) | First 1 of 1 Last

ID	ID Type	*Distribution ID	
1	User	VP1	

nVision Share Report Request page

Users with the Report Request Administrator role can change access modes for any report request using the nVision Report Request Admin page.

nVision Report Request Admin

Source User ID:

Target User ID:

No.Of records affected:

nVision Report Request Admin page

See also

PeopleSoft 8.44 PeopleBook: PS/nVision, "Running PS/nVision Reports," Creating Report Requests

PeopleSoft 8.44 PeopleBook: PS/nVision, "PS/nVision Security," Securing Report Requests

PeopleSoft 8.44 PeopleBook: PS/nVision, "PS/nVision Reporting on the Web," Setting Up Report Requests

Error Checking and Handling

PS/nVision has been enhanced to perform error checking and handling more efficiently, making it more robust.

Using Style Sheets with nPlosion Layouts

The documentation on using style sheets with nPlosion Layouts has been clarified.

See Also

PeopleSoft 8.44 PeopleBook: PS/nVision, "Using nPlosion," Using Style Sheets with nPlosion Layouts

Saving Report Requests

When you make changes to a report request, it is automatically saved when you run the request. To save a report request without running it, click the Save button. It is not possible to make a change to a report request without saving it.

Known Issues

Do Not Run Reports While Modifying Trees

You should not run PS/nVision reports while you are modifying trees, because it could lead to incorrect results.

PS/nVision Not Configured Properly For a Workstation

Previously, the following message would appear if some components had not been registered:

PS/nVision is not configured properly for this workstation.

This problem has now been fixed. PeopleSoft Process Scheduler automatically registers PS/nVision DLLs during the boot up.

Note. For 2-tier users, manual registration is still required.

To configure PS/nVision:

1. Log on as a System Administrator.
2. Go to Configuration Manager, Client Setup.
3. Select Install Workstation. Click Apply or OK to install the workstation.

Note. The System Administrator can also select Start, Run, and type: <psnvs.exe path>/register. For example, c:\pt844\bin\client\winx86\psnvs.exe/register

Using nPlosion with Summary Trees

Previously, when a summary tree chartfield filter was nPloded where the ledger's corresponding chartfield type was detail, incorrect details or no data were shown under the summary tree nodes. This action has now been disabled by PS/nVision returning the Excel error code #N/A to the affected cells.

Note. Ps/nVision also returns the Excel error code when using a detail chartfield filter in conjunction with a summary chartfield on the ledger.

To avoid this issue you should always use the same type of summary or detail filter as the corresponding ledger's chartfield if the field is to be nPloded.

Report Instances Not Saved in Instance Directory

In 8.44, nVision will not keep copies of report instances in the instance directory. Report instances will be saved in a temporary directory under the instance directory and after the report instance is posted to the report repository, nVision will delete the temporary directory.

Note: If a process terminated abnormally, the report instance may not be deleted.

SQR for PeopleSoft

PeopleTools 8.44 provides the following enhancements for SQR:

- The performance of SQR has been improved overall on all platforms; in particular, the performance on IBM z/OS has been doubled.
- It provides support for representing data in Thai character sets.
- It provides support for font linking; this allows the appropriate list of fonts to represent appropriate Unicode characters in results.

SQR Font-Linking for PDF Output

SQR now supports font-linking for PDF output. In previous releases, a single font number (specified in the program using DEFINE-PRINTER or ALTER-PRINTER) is mapped to a single font. In PeopleTools 8.44, a single font number can be mapped to up to 10 fonts. This feature enables SQR to provide better global reporting support.

The PeopleSoft system provides pssqr.ini/unx files preconfigured with font-linking data that supports all of the languages supported out of the box. Because font-linking data is language-specific, several language-specific configuration files now exist for Windows and UNIX or Linux. The appropriate configuration file is selected based on the report language preference of the user.

Use the pssqr.ini/unx files that come with PeopleTools 8.44 release, and apply your modifications to these files. This eliminates the need to configure font-linking data. The PeopleSoft installer now makes previously required changes to the pssqr.ini/unx files, based on information gathered at installation time. Specifically, the database type and Unicode/non-Unicode installation options affect the result of the configuration made by the installer. Select the appropriate options when you are installing. Currently, font linking is not supported by SQR running on z/OS.

See Also

PeopleTools 8.44 PeopleBook: SQR Language Reference for PeopleSoft.

SQR TrueType Font Support for PDF Output

SQR now supports PDF output using TrueType fonts (including OpenType fonts with TrueType metric data). TrueType fonts are always embedded in PDF documents as a subset.

PeopleSoft now bundles several TrueType fonts for PDF output for better international support. pssqr.ini/unx files are preconfigured to use these bundled TrueType fonts. PeopleSoft recommends using the pssqr.ini/unx files that come with the 8.44 release, and applying your modifications to these files—eliminating the need to configure font-linking data.

The TrueType font files provided with PeopleTools are licensed for server-side install only, and they should be used only with PeopleSoft server modules. They should not be moved to any location other than the default location where the PeopleSoft installer copies the fonts. Currently, TrueType font embedding is not supported by SQR running on z/OS.

See Also

PeopleTools 8.44 PeopleBook: SQR Language Reference for PeopleSoft.

Options for DECIMAL=COMMA ZPARM Support: DB2 z/OS (OS390 Only)

For z/OS (OS390) customers, SQR now supports the DECIMAL=COMMA ZPARM parameter. PeopleSoft developers have created a parameter that can be added to the PSSQR.INI file that instructs SQR to automatically insert a space after any comma that is not in a text literal string.

The parameter is ForceSpaceAfterComma=[FALSE|TRUE]. It must be added to the Default-Settings stanza of the PSSQR.INI file. This parameter is documented in *PeopleTools 8.44 PeopleBook: SQR Language Reference for PeopleSoft*.

When creating or customizing SQR programs, remember that if a number has a comma as a decimal separator and it appears in a SQL statement, the number automatically receives a space.

For example:

```
BEGIN-SELECT
COL1
COL2
COL3

FROM TABLE1
WHERE COL1= 12345,55
END-SELECT
```

The above BEGIN-SELECT would be converted to:

```
SELECT COL1, COL2, COL3 FROM TABLE1 WHERE COL1 = 12345, 55
```

Notice the space. This will cause a SQL error. To avoid this problem, the value must be stored in a variable and used as a bind value.

For example:

```
let $value = "12345,55"
```

```
BEGIN-SELECT
COL1
COL2
COL3

FROM TABLE1
WHERE COL1= $value
END-SELECT
```

Note that this setting does not affect the printing or formatting settings in the SETENV.SQC (SDecimal).

DB2 Database Warnings

In prior releases, SQR with a DB2 database would abort execution when a DB2 warning was issued by the database. In this release, DB2 warnings are ignored and execution continues.

Additionally, there is now an option to show warnings in the SQR console and log or suppress their printing. This parameter can be added to the PSSQR.INI (PSSQR.UNX) file in the Default-Settings stanza as follows:

```
[Default-Settings]
AllowDateAsChar=TRUE
output-file-mode=long
OutputTwoDigitYearWarningMsg=FALSE
UseY2KCenturyAlgorithm=TRUE
Default-Numeric=Decimal(26)
ShowDBWarnings=TRUE
```

If the parameter is omitted, the default behavior is FALSE and the warning messages are not printed.

PS_HOME Environment Variable

If you are running SQR of PeopleSoft Process Scheduler, the PS_HOME environment variable must be set to a proper PeopleSoft installation.

Integration Tools

The integration technology of PeopleSoft Pure Internet Architecture has been enhanced. The enhancements include **more robust enterprise integration points** and the ability to easily connect to Oracle, SAP, and Siebel applications.

This section discusses changes and enhancements in the following areas:

- PeopleSoft Integration Broker
- PeopleSoft Mobile Agent
- PeopleSoft MultiChannel Framework
- Component interfaces
- Optimization
- Integration tools and utilities

PeopleSoft Integration Broker

New enterprise resource planning (ERP) connectors to SAP, Siebel, and Oracle deliver protocol-level connectivity between PeopleSoft enterprise integration points and native integration technologies in these third-party ERP products. The inclusion of these ERP connectors at no additional cost adds significant value to the integration technologies already contained in PeopleSoft 8.

Enhancements to the setup, administration, and maintenance of PeopleSoft Integration Broker improve message monitoring, batch archiving of messages, failover, and dynamic connector properties. With the release of PeopleTools 8.44, you can dramatically reduce your cost to integrate PeopleSoft applications with SAP, Oracle, and Siebel by using the connectors now included with PeopleTools.

With the release of PeopleTools 8.44, **Message monitoring enhancements** enable administrators to have better visibility into the runtime status of messages and error conditions. This leads to speedier resolution of problems. Enhancements to PeopleSoft Integration Broker failover provide support for **prioritized multiple backup domains**, **heartbeat timeout levels**, and **email alerts**, all of which improve the robustness of integration architecture in larger implementations. **Connector properties can be configurable** without giving access to the gateway file system. This is because the Connector properties file can now be accessed in PeopleSoft Pure Internet Architecture.

With the release of PeopleTools 8.44, enterprise integration points (EIPs) are easier to set up, troubleshoot, maintain, and administer. A **new integration point setup wizard** for developers ensures correct configuration of integrations. This reduces the troubleshooting of EIPs. A **new integration point viewer** enables all parts of an integration point to be viewed in one place. This assists in debugging. **New EIP test automation** improves testing of EIPs. It is used for all delivered EIPs, and you can use it to test the operation of newly-created or modified delivered EIPs.

Finally, **appropriate web services description language (WSDL) files** are generated for defined EIPs. This removes the need for coding and speeds up the use of EIPs through web services.

Activation of Messaging Server Domains

With this PeopleTools release, you must activate the domain on which the pub/sub server resides before you can use the messaging server.

Activating Messaging Server Domains

To activate a domain:

1. Select PeopleTools, Integration Broker, Monitor, Monitor Message.
2. Select the Domain Status tab.

The Domain Status page opens.

3. In the Domains section:
 - a. Locate the row that lists the name of the machine on which the domain resides.
 - b. In the Domain Status drop-down list box, select Active.

- c. Click the Update button.

See Also:

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, "Using Integration Broker Monitor," Working with Pub/Sub Server Domains.

Web Server Path Changes

PeopleSoft has moved a number of files, utilities, and other items from the BEA WebLogic and IBM WebSphere directories to <PS_HOME>.

This table describes the changes:

Description	File Name	Location
Integration gateway properties file	integrationGateway.properties	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW\WEB-INF
Integration gateway error log file	errorLog.html	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW
Integration gateway message log file	msgLog.html	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW
Send Master utility batch file	StartSendMaster.bat and StartSendMaster.sh	<PS_HOME>\webserv\<DOMAIN>
Send Master properties file	sendmasterproperties.xml	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW\WEB-INF\classes\com\peoplesoft\pt\sendmaster
Simple Post utility	NA	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW\WEB-INF\classes\com\peoplesoft\pt\simplepost
Gateway classes	NA	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW\WEB-INF\classes
Java classes	NA	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW\WEB-INF\classes
Keystore	pskey	<PS_HOME>\webserv\<DOMAIN>\keystore
Integration Broker Connector SDK	NA	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW\SDK
Instructions for setting up the connector development environment	ReadMe.txt	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW\SDK\docs
API documentation	index.html	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW\SDK\docs
Sample code for listening and target connector classes	NA	<PS_HOME>\webserv\<DOMAIN>\applications\peoplesoft\PSIGW\SDK\src

Setting Up SSL Encryption

The procedure for setting up SSL encryption for use with PeopleSoft Integration Broker has changed with this release.

At press time for the PeopleTools 8.44 PeopleBooks, the new procedure was not yet available, and therefore is not included in the PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker. A Documentation Update covering this subject called, Setting Up SSL Encryption, is posted on Customer Connection.

Integration Point Setup Wizard

The Integration Point Setup Wizard is a new feature that guides you through the process of setting up point-to-point integrations. It guides you through specification of sending and receiving nodes, transactions, transformation, request messages, response messages, and so on. After you make your selections in the Integration Point Setup Wizard, it creates the point-to-point integration, including any required relationships. You can use the Integration Point Setup Wizard to create synchronous, asynchronous, and asynchronous-to-synchronous integrations.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, "Using the Integration Point Setup Wizard."

Integration Point Viewer

The Integration Point Viewer is a new read-only tool that enables you to display a point-to-point view of an integration to validate its structure and confirm that the associated objects are active. Depending on the integration setup and the transaction type, the Integration Point Viewer can provide direct links to the node definition, the transaction, and the relationship. By using these links, you can view additional information and make modifications.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, "Using the Integration Point Setup Viewer."

Automated EIP Testing

The PeopleSoft system provides a set of tools for automated EIP testing. You can perform automated EIP testing to unit test, perform cross-application business process testing, or regression test EIPs.

When using EIP test automation, PeopleSoft Integration Broker records message details as they are exchanged between PeopleSoft applications, as well as between PeopleSoft and third-party applications. This feature enables you to test integration when these systems are not available and playing back the recorded messages at a later time to mimic integrating with them.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, "Using Automated EIP Testing."

Third-Party Integrations Using Web Services Definition Language (WSDL) Files

You can create inbound and outbound integrations with third-party systems using WSDL. PeopleSoft Integration Broker provides the following functionality for integrations using web services.

WSDL Import

The PeopleSoft system enables you to manually import WSDL, through a file or URL, to create synchronous and asynchronous integrations.

ERP Connectors

The PeopleSoft system provides access to a third-party software product, Actional SOAPswitch, which provides ERP adaptors (or connectors) that enable you to generate WSDL from SAP, Oracle, and Siebel systems and then generate integration points. Two other adapters, the XML adapter and the J2EE adapter, are also delivered.

After you create or identify the WSDL to use for an integration, you use PeopleSoft Integration Broker to import the WSDL, create transaction metadata, and execute the transaction.

Note the following points regarding the delivered adapters:

- The SAP R/3 adapter enables you to create outbound integrations from the PeopleSoft system to an SAP system and inbound integrations from SAP to PeopleSoft.
- The Oracle adapter enables you to create outbound integrations from the PeopleSoft system to an Oracle system.

The ability to create integrations from Oracle to PeopleSoft is not currently supported.

- The Siebel adapter allows you to create outbound integrations from PeopleSoft to Siebel.
- Documentation for using this functionality is included in the *PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker*.

More extensive information is available in the Actional SOAPswitch documentation provided. To access the Actional SOAPswitch documentation, select PeopleTools, Integration Broker, Web Services, ERP Connectors. Actional SOAPswitch appears. In the left navigation area, click the Documentation button.

- At this time the Actional SOAPswitch product that comes with PeopleTools 8.44 is supported only on Windows and Solaris platforms.
- At this time, the Actional SOAPswitch product that comes with PeopleTools 8.44 does not support client authentication (mutual authentication) for inbound requests.
- At this time the Actional SOAPswitch product that ships with PeopleTools 8.44 does not support client authentication (mutual authentication).
- At this time the Actional SOAPswitch product that ships with PeopleTools 8.44 uses a stand-alone Jetty servlet engine. The Jetty servlet engine is bundled with and automatically installed when you install SOAPswitch. See the Actional SOAPswitch documentation for more information. Running Actional SOAPswitch as a server under BEA WebLogic 8.1 or WebSphere 5.1 is not supported.

Published EIPs

The Publish EIPs link enables you to generate WSDL for PeopleSoft message or component interface definitions. This enables third-party systems that can handle WSDL to access the given interface by using SOAP over HTTP.

WSDL Repository

The WSDL Repository provides access to all existing WSDL files imported into the PeopleSoft system. You can view service details as well as the contents of WSDL documents.

The WSDL Repository also provides access to the WSDL Operation Wizard.

WSDL Operation Wizard

The WSDL Operation Wizard enables you to create PeopleSoft Integration Broker metadata, such as channels, nodes, and node transactions from imported WSDL files for use in the PeopleSoft system.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, “Creating Third-Party Integrations Using WSDL.”

Integration Broker Monitor Enhancements

Integration Broker Monitor includes the following new enhancements:

Message Statuses for Asynchronous Messages

When viewing message status information for asynchronous messages in the Monitor Messages component, on the Overview page the message status Contracts Created replaces the former message status Done. This status indicates that the message instance has finished processing and either a publication or subscription contract has been created.

Canceling and Resubmitting Messages

You can cancel or resubmit multiple messages at one time by using the Message Instance, Pub Contracts, and Sub Contracts tabs in the Message Instance component. The pages have three new buttons: Resubmit, Cancel, and Select All. Each grid row also has a new Select check box that enables you to select specific messages.

Setting Up Domain Failover

Domain failover ensures that PeopleSoft Integration Broker continues processing message requests and responses, even if it incurs errors or other problems on the primary domain. When failover is activated and PeopleSoft Integration Broker incurs an error or problem on the primary domain, the failover mechanism automatically starts, and processing switches to back up domains. You can also set up domain failover groups so that all failover for specific processes takes place on specific domains.

Limiting Messages Loaded into the XML Viewer

The Message Details page no longer automatically loads XML messages onto the page, which often resulted in long delays or timeouts. There is now a configurable Application Server parameter Message View Size.

Whenever a message exceeds the Message View Size the Download XML link will appear allowing you to download the XML into a file on the file system using standard PeopleCode attachment functionality, and view or edit (if applicable) using your XML tool of choice. Below this limit, messages will be loaded and viewable within the component on demand when you click the View XML link.

To use this feature in DB2 OS/390 and z/OS environments, change the table PSIBMSGFILE_ATT to PSIMAGE or to a bigger tablespace.

Running Batch Message Archiving Processes

The Archive Messages component enables you to archive all messages. Alternatively, you can select specific messages to archive by status (Done or Cancel) or by age.

Viewing Message Channel Information

You can view channel partitioning information in the Integration Broker Monitor when partitioning is in effect. This information includes viewing a message's position in the queue.

Retrieving Archived Messages

In prior PeopleTools releases, when you retrieved archived messages, only the header was retrieved. With this PeopleTools release, the message header and message data (body) are now retrieved.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, "Using Integration Broker Monitor."

Categorization of Error Messages

A category is now displayed at the beginning of all PeopleSoft Integration Broker error messages to assist you debugging. For example the category could indicate the problem originated in the integration gateway, subscription PeopleCode, transformation, or in the runtime framework.

Integration Gateway Enhancements and Changes

This section discusses additional changed features for PeopleSoft Integration Broker.

Encrypting Passwords

Any required or optional integration gateway and connector properties passwords must be encrypted. When working in PeopleSoft Pure Internet Architecture, you can use the Password Encryption utility (which has a graphical user interface) to encrypt passwords. The command line password encryption utility PSCipher is also still available.

Accessing Integration Gateway Properties Through PeopleSoft Internet Architecture

You can now access the `integrationGateway.properties` file in PeopleSoft Pure Internet Architecture to view and set integration gateway properties using a new Gateway Properties page. To access this page select, PeopleTools, Integration Broker, Gateway, and click the Properties link to the right of the integration gateway URL field. Access to this page is password-protected. The default user ID is *administrator* and the default password is *password*. Change these values as soon as possible. You can still specify and edit gateway properties directly in the `integrationGateway.properties` file located at `<PS_HOME>\webserver\<DOMAIN>\applications\peoplesoft\PSIGW\WEB-INF`.

Refreshing Gateway Properties

You now refresh the gateway properties on the Gateway Properties page. The Apply button replaces the former Refresh button.

FTP Target Connector

GET and directory list functionality has been added to the FTP target connector.

PeopleSoft Integration Broker also supports secure communication with FTP servers using FTPS. For the FTP target connector to function properly, the following JAR files from IBM must reside in the CLASSPATH of the web server running the integration gateway: `FTPProtocol.jar` and `ipworksssl.jar` (required for FTPS). One of the optional node-level FTP connector properties is `FILENAME`. If you do not specify a filename, the FTP(S) target connector performs a GET to retrieve the directory list from the remote FTP server. The directory list retrieved is in XML format, and you must parse the XML document to read its contents.

Integration Gateway Load-Balancing

The integration gateway has been enhanced so that you can run it behind a third-party load balancer product. Load-balancing enables you to increase gateway performance by distributing processing among multiple gateways. To use load-balancing with PeopleSoft Integration Broker, the Gateways component now provides an option to indicate that a load balancer URL is used. It also enables you to enter the URLs and properties for each of the managed gateways.

Simple File Connector Security

To secure files during processing, you can set the `ig.fileconnector.password` property in the `integrationGateway.properties` file, and you can set the Password property in the connector properties in the Gateways component. Setting file security is optional.

Capturing Request Contents

In the Logging section of the integration gateway properties file, set the log level to 5 to capture the entire contents of messages sent to the HTTP listening connector, including HTTP requests and HTTP headers. This information is written to the integration gateway message log.

JMS Listening Connector Enhancements

Here are the Java Message Service (JMS) enhancements:

- With this PeopleTools release, you can set JMS header properties in the body of the XML message—in addition to the JMS headers themselves—or in the `integrationGateway.properties` file.

- You can capture errors in either error topics or error queues.
If both an error topic and an error queue are set up and configured, only the error queue captures error messages.
- JMS user names and passwords for connecting to JMS providers are optional to offer MQBinding support.
- New JMS queue listener properties are listed in the following table.

You access these properties in the integrationGateway.properties file:

Property	Description
ig.jms.Queue1.MessageName	(Optional) Specify the name of the message.
ig.jms.Queue1.MessageVersion	(Optional) Specify the message version.
ig.jms.Queue1.RequestingNode	(Optional) Specify the name of the requesting node.
ig.jms.Queue1.DestinationNode	(Optional) Specify the name of the destination node.
ig.jms.Queue1.NodePassword	(Optional) Specify the password for the requesting node. If you choose to specify a password, you must encrypt it.
ig.jms.Queue1.SubChannel	(Optional) Specify the name of the subchannel. Messages published to this queue go to the subchannel indicated.

- New JMS topic subscriber properties are listed in the following table.

You access these properties in the integrationGateway.properties file:

Property	Description
ig.jms.Topic1.MessageName	(Optional) Specify the name of the message.
ig.jms.Topic1.MessageVersion	(Optional) Specify the message version.
ig.jms.Topic1.RequestingNode	(Optional) Specify the name of the requesting node.
ig.jms.Topic1.DestinationNode	(Optional) Specify the name of the destination node.
ig.jms.Topic1.NodePassword	(Optional) Specify the password for the requesting node. If you choose to specify a password, you must encrypt it.
ig.jms.Topic1.SubChannel	(Optional) Specify the name of the subchannel. Messages published to this

	queue go to the subchannel indicated.
--	---------------------------------------

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, “Managing the Integration Gateway.”

Send Master Enhancements

Send Master enhancements include:

- Ability to save response data to disk
- HTTP(S) enhancements, including the use of HTTP 1.1, proxy server support, and keystore support.
- Ability to gather processing performance statistics when working with PeopleSoft Integration Broker MIME projects.

Send Master returns statistics relating to processing on the application server and gateway, as well as response processing.

- An EIP Testing (Batch EIP) project type that enables you to test batches of messages from a file directory that you specify for automation testing and enables testing of different transaction values.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, “Using Send Master to Test Message and Connector Processing.”

Messaging Enhancements

This section highlights messaging enhancements.

Bypassing the Integration Engine to Send Messages

You can use the built-in PeopleCode functions `ConnectorRequest` and `ConnectorRequestURL` to send synchronous requests via HTTP or FTP directly through the integration gateway, without any message processing taking place on the integration broker engine.

See *PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker*, “Managing the Integration Gateway,” Bypassing the Integration Engine to Send Messages.”

Using Message Object Functionality with Unstructured Messages

With this PeopleTools release, when working with unstructured XML messages you can use all of the Message object functionality by using two new built-in functions, `SetXMLDoc` and `GetXMLDoc`. `SetXMLDoc` enables you to load and pass unstructured data into the Message object; `GetXMLDoc` enables you to obtain unstructured data from the message object.

See *PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker*, “Sending and Receiving Messages,” Using Message Object Functionality with Unstructured Messages.

Setting and Overriding Target Connector Properties at Runtime

PeopleSoft Integration Broker enables you to dynamically override target connector properties at run time that have previously been set at the node, connector, and transaction level by using the PeopleCode IBInfo object, the Connector Info object, and the OnSend event.

See *PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker*, “Sending and Receiving Messages,” Using Message Object Functionality with Unstructured Messages.”

Identifying Field Level Changes

When sending and receiving messages, all field-level message attributes get stripped and blank data values appear in XML as empty tags. As a result, you cannot determine if a field value was blank by definition or set to blank during data entry.

A field-level attribute, `isChanged`, has been added to identify that identifies if a field's value was changed. The `CopyRowset` functions (`CopyRowset`, `CopyRowsetDelta` and `CopyRowsetDeltaOriginal`) have been modified to set the `isChanged` attribute automatically to identify fields that have been changed. The `GetRowset` function has been modified to use this attribute when building out a rowset.

See *PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker*, “Sending and Receiving Messages,” Understanding Identifying Changes to Field-Level Attributes.”

The correct information is for asynchronous messages, HTTP status codes 200 to 206 indicate a message status of Success. Identifying SOAP Faults

You can use the PeopleCode event `OnAckReceive` to access IBInfo data to read the content of acknowledgements returned by recipient systems of asynchronous SOAP messages. The ability to access acknowledgement content is useful when sending SOAP messages, since although there may be no HTTP protocol errors while sending them, SOAP faults may occur.

If the message definition is an unstructured message, use `&MSG.GetXmlDoc()`; which returns an `XmlDoc` object to get the response content. If the message is a structured message, use `&MSG.GenXMLString()`; which returns a string object which can be loaded into an `XmlDoc` object to get the response content data.

If SOAP faults are found, you can set the status equal to `Error` so that this error will appear in Integration Broker Monitor for the publication contract.

The `OnAckReceieve` event can also be used to read response content data returned from third-party systems if using the HTTP Target Connector.

See *PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker*, “Sending and Receiving Messages,” Handling Outbound Asynchronous Transactions.

External Message ID

You can specify an external message ID to uniquely identify an inbound message received in PeopleSoft Integration Broker. This ensures that no duplicate messages are delivered to the system. The `ExternalMessageID` parameter is optional, but if you do specify this parameter, it must be unique and contain no more than 70 characters.

You can specify this parameter in the following locations:

- JMS listening connector.

The `ExternalMessageID` parameter replaces the `JMSMessageID` parameter.

- HTTP listening connector.

The HTTP listening connector can receive an external message ID in query strings, HTTP headers, SOAPAction headers, and PeopleSoft IBRequest XML.

- Send Master.

This parameter is available when working with Integration Broker MIME and XML project types.

See Also:

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, "Managing the Integration Gateway," Working with the JMS Connectors.

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, Managing the Integration Gateway," Working with the HTTP Connectors.

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, "Using Send Master to Test Message and Connector Processing," Using Integration Broker Projects.

Filtering, Transformation and Translation

Importing and Exporting Codesets

The PeopleSoft system provides two Data Mover scripts that you can use to import and export codesets between databases:

- CODESET_DELETE_IMPORT.DMS.

Use this script to purge and then import codeset data into a target database.

- CODESET_EXPORT.DMS.

Use this script to export codeset data from a source database to a target database.

Running a Sample Transformation Test

The PeopleSoft system provides a sample project called PT_IBTRANSFORM_TEST that you can use to run a sample test using the utility.

XSLT Transformation Example

A working transformation example using XSLT is provided in the PeopleTools software development kit (SDK). The location is:

```
<PS_HOME> \sdk\pstransform\samples\TRANSFORMTST.xml.
```

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Integration Broker, "Applying Filtering, Transformation and Translation."

Known Issues and Workarounds

This section discusses some known issues and workarounds.

Transformations and Outbound Synchronous Requests

Transformations on outbound synchronous requests run from within Application Engine programs (in batch) that contain XSLT steps are not supported on the OS/390 and z/OS platforms because Xalan is not available on these platforms. Xalan is an XSLT processor that transforms XML documents into HTML, text, or other XML document types.

Routing Information Exposed

PeopleSoft Integration Broker gateway does not perform any authentication, and since requests to the PeopleSoft and PeopleSoft 8.1 listening connectors carry routing information, requests could potentially be routed (relayed) thru the gateway to any URL via PeopleSoft target connectors. Therefore, to prevent this, configure SSL encryption on your gateway machine and use HTTPS for all requests sent to these listening connectors.

Restart Periods on Messaging Servers

Using a value greater than 3540 for dispatchers restart period results in constant restarts.

Publication IDs and Subscription PeopleCode

Generally, if a message is successfully published, the PubID and PubNodeName properties are set to the publication ID and publishing system node name, respectively. The only exception is when a publish is performed as part of subscription PeopleCode. In this case, the subscription process is always executed in deferred mode, due to performance considerations, and so the PubID field is not populated.

Messaging from PeopleTools 8.1 to PeopleTools 8.44

You cannot use digital certificates when messaging from PeopleTools 8.1 to PeopleTools 8.44 in the WebSphere web server environment.

Pinging from PeopleTools 8.1 to PeopleTools 8.44

Pinging from PeopleTools 8.1 to PeopleTools 8.44 fails when digital certificates are in use.

PeopleTools Mobile Agent

Changes to component interface OnSelect PeopleCode and synchronization server functionality used in PeopleTools Mobile Agent synchronization **streamlines full synchronization** of business data. Using the new filtered synchronization capabilities has shown dramatic improvements in business data synchronization times, and significantly less network traffic load.

The existing Update Business Data and Update Applications synchronization options are enhanced to **expedite data synchronization**.

The Update Business Data option (formerly Full Sync) expedites data synchronization by providing complete validation of metadata on the mobile device before synchronizing any server changes to the mobile device. During this step, PeopleTools Mobile Agent analyzes metadata objects that already exist on the mobile device and on the server. If any of the existing objects have been changed or deleted, or if security access to an object is lost, the Update Business Data synchronization stops, and the mobile user can use a link on the synchronization results page that to immediately launch an Update Applications synchronization. If the mobile user selects this option, the authentication values already entered are used to perform the Update Applications synchronization. If the user dismisses the results page, the user must manually perform the synchronization using the Synchronization menu.

The Update Applications option expedites data synchronization by not completely replacing application metadata. It replaces only the business data that is necessary. Only metadata objects that have changed are reloaded, leaving all other metadata unchanged. Any changes that are made to a component interface definition, including additions or deletions to translate table values, require complete reloading of business data. Any additions or deletions of mobile page definitions, menu items, or menu groups may incur deletion or new loading of business data; however, they do not require reloading of existing business data. Changes to all other ancillary metadata objects can safely be synchronized without affecting business data in any way.

Enhanced conflict resolution options simplify data synchronization.

The **enhanced conflict resolution options** are:

- **Server wins**

If there is a conflict, the device update is rejected. No PeopleCode is run. An error message is sent to the device. The server data is sent to the device. The user can reapply the changes on the device and upload the changes again.

- **Device wins**

The device update is always accepted, even if there are conflicts.

- **Custom**

If there is a conflict, this conflict resolution rule uses developer-defined PeopleCode to decide whether the device update is accepted or rejected.

A new component interface **Synchronization property** is added that enables data structures to be available and maintainable on the mobile device but never synchronized back to the server.

PeopleSoft MultiChannel Framework

New application classes provide access to the status of tasks in PeopleSoft MultiChannel Framework. The **universal queue API** enables applications to determine the properties of a task and track its progress through the queue cycle. Administrators can maintain tasks that overflow or escalate without regenerating new task IDs. This universal queue API enhancement also enables administrators to monitor metrics for agents, tasks, and queues.

The new universal queue API enables an application to monitor task status, check relationships between physical and logical queues, and monitor agents, tasks, and queues. The API enables you to inspect a task that has been escalated or sent to the overflow pool and route it accordingly. The universal queue API provides the ability to re-queue a task that has timed out and is either in the overflow or escalation queue. The task retains the original task properties and ID. Only persistent task properties can be monitored (email and generic events).

Real-Time Event Notification Server

Enhanced real-time event notification (REN) server security conforms to security for all browser requests by requiring that server-based REN server clients send an encrypted token identifying the REN server permissions of that server or its current user. Posts to the REN server from other PeopleSoft servers require the new encrypted token. The topics that these servers can use to post events are secured using permission lists defined for each server. The encrypted token timeouts in a manner consistent with the single-signon token timeout.

Note. MCF servers are not supported for Informix databases on HP Unix.

Component Interfaces

The Excel to Component Interface utility now supports the uploading of data in multiple languages by specifying the PeopleSoft language code in ExcelToCI.exe. Additionally, translated workbooks are available for each delivered language. Other enhancements include the ability to wrap columns on templates that have more than 256 columns, and the option to specify an error threshold for each chunk of data that is uploaded. Finally, the Excel to Component Interface utility has undergone extensive usability and user interface enhancements for this release.

PeopleSoft Optimization Framework

This section discusses new and changed features for PeopleSoft Optimization Framework in PeopleTools 8.44.

Optimization PeopleCode Plug-In

PeopleTools 8.44 enhances the PeopleSoft Optimization Framework to allow PeopleSoft to develop and deliver optimization-based applications in PeopleCode. An Optimization PeopleCode plug-in is created specifically for an application of which the value is significantly enhanced when optimization technologies are applied, such as resource scheduling plug-in for PeopleSoft application Resource Management and supply chain planning and scheduling plug-in for PeopleSoft Supply Chain Management. The application knowledge and business logic of an optimization problem resides in the plug-in.

Note. An Optimization PeopleCode plug-in is provided with each installed PeopleSoft application that uses PeopleSoft Optimization Framework. There is no Optimization PeopleCode plug-in in the PeopleTools installation. PeopleSoft application documentation discusses the available plug-ins and their required implementation steps and parameters.

If an application is delivered with the Optimization PeopleCode plug-in, you can adapt the plug-in to a variety of different optimization tasks using the enhanced problem type definition and several new PeopleCode elements, which include:

- An application class, PT_OPT_BASE:OptBase.
- A built-in function, CreateOptInterface, and a class, OptInterface.

OptBase Application Class

This PeopleCode application class is part of the PT_OPT_BASE application package. It establishes the basic framework for developing PeopleCode that invokes the Optimization PeopleCode plug-in. To use the plug-in, you develop an application class that extends the OptBase application class. OptBase contains methods for handling input and output parameters, implement callback capability, and applying initial preprocessing before the optimization.

Note. The problem type definition to which these methods apply is the one that specifies this derived application class.

Invoking the Optimization PeopleCode Plug-In

If you're developing an optimization application that uses the Optimization PeopleCode plug-in, you must perform the following tasks to invoke the plug-in:

- Develop a PeopleCode application class that extends the PT_OPT_BASE:OptBase class.
- Define methods in your application class that use the PeopleCode OptInterface class to perform your optimization functions.
- Define a problem type that specifies the Optimization PeopleCode plug-in by selecting the *PeopleCode Plugin* check box in the problem type properties.
- Also in the problem type properties, specify the application package and application class that you developed.
- Define transactions in your problem type definition that correspond to the methods you developed in your application class, with corresponding parameters.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Optimization Framework, "Understanding PeopleSoft Optimization Framework"

PeopleTools 8.44 PeopleBook: PeopleSoft Optimization Framework, "Developing Optimization PeopleCode"

Platform Memory Limitations

PeopleTools imposes a memory size limit on optimization engines that depends on the operating system platform where your application server is installed. The current memory limitations are as follows:

- IBM AIX
By default, optimization engines can consume up to 2 gigabytes (GB) of memory. This is the maximum size available.
- Sun Solaris
By default, optimization engines can consume up to 4 GB of memory. This is the maximum size available.

- HP Tru64 Unix

This is a true 64-bit operating system. Optimization engines can theoretically grow to a memory size of 4 GB times 4 GB.

- HP-UX

By default, optimization engines can consume up to 2 GB of memory. You can increase this limit to 3.8 GB by issuing the following commands:

1.4. chatr +q3p enable \$PS_HOME/bin/PSOPTENG

2.5. chatr +q3p enable \$TUXDIR/bin/BBL

- Microsoft Windows

By default, optimization engines can consume up to 2 GB of memory.

- You can increase this limit to 3 GB on Microsoft Windows NT Server Enterprise Edition version 4.0 using the 4GT RAM Tuning feature, which is documented in the Microsoft Help and Support knowledge base.

See <http://support.microsoft.com/>

- You can increase this limit to 4 GB on Microsoft Windows 2000 Advanced and Datacenter editions, using the Microsoft Windows 2000 Address Windowing Extensions (AWE) API. This is documented in the Microsoft Help and Support knowledge base.

See <http://support.microsoft.com/>

- Red Hat Linux

By default, optimization engines can consume up to 1 GB of memory. This is the maximum size available.

Note. Depending on your hardware and software environment, you may be able to increase the Red Hat Linux memory limit to between 2 GB and 3 GB. This capability is documented on the Red Hat website.

See <http://www.redhat.com/>.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Optimization Framework, “Administering Optimization Server Components,” Configuring Optimization Engines

Synchronizing Table Versions

The Administer Engines - Tables page has a new feature: the Synchronize Table Versions button.

When you use Data Mover to move data from one database to another, it is quite often the case that the versions of problem instance data and the PSOPTSYNC table are out of synchronization. Click this button to synchronize the PSOPTSYNC table with the optimization tables.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Optimization Framework, “Designing Problem Type Definitions,” Administering Optimization Tables

Integration Tools and Utilities PeopleBook Changes

The PeopleSoft Integration Tools and Utilities PeopleBook has been discontinued. The contents of the PeopleBook has been moved to other PeopleTools PeopleBooks as follows:

Content	New Location
File Layouts and Data Interchange	<i>PeopleTools 8.44 PeopleBook: PeopleSoft Application Designer.</i>
The PeopleSoft API Repository	<i>PeopleTools 8.44 PeopleBook: PeopleCode API Reference</i>

See the PeopleSoft Application Designer and PeopleCode sections in these release notes for information about any new or changed features.

Known Issues and Workarounds

See the PeopleSoft Application Designer and PeopleCode sections in these release notes for information about any known issues and workarounds.

Development Tools

This section discusses development tools such as PeopleSoft Application Designer and PeopleCode.

PeopleSoft Application Designer

Several changes have been made to PeopleSoft Application Designer for the PeopleTools 8.44 release. These enhancements are described in this section.

Spell Check

Spell check is now available in the PeopleSoft Application Designer for user-facing labels and text in projects and legacy data. Spell check verifies spelling for:

- Message catalog entries.
- Page definitions (label text).
- XLAT tables.
- Component definitions (tab and menu labels).
- Portal registry (labels and attribute labels).
- Record field labels.

You must enable spell check in the PeopleTools Options dialog box by selecting the Validate tab. This ensures that spell check runs on the designated project when you validate the project.

The system logs spell check results to the Spell Check tab in the PeopleSoft Application Designer output window. The text *Begin Spell Check* appears as the first line on the tab. The first line for each spell check category indicates the total number of entries that were checked for the project. The last line in the output window indicates the total misspelled words encountered during the check.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Application Designer, “Using PeopleSoft Application Designer,” Using Spell Check, Spell Check Results

Tablespace DDL

In this release, PeopleSoft Application Designer and the delivered database creation scripts now support Locally Managed tablespace of Oracle 9i.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Application Designer, “Administering Data”

Page Definition Enhancements

There are several new features related to page definitions and page controls. This section describes these enhancements.

Order Tab

This release includes a new ID column to the Order tab for page definitions. This column represents the order in which you add new fields to a page. If you modify the order of page fields on the page, the ID number assigned to each field remains constant. Consequently, the IDs may not always appear in sequential order. The field ID appears on the Compare report when a database comparison is performed to assist you in identifying specific page fields.

Save Processing

This release enables you to override the save option for specific page fields if the save option normally appears when users exit a page. The Set Component Changed attribute appears on the Use tab of the page field properties for edit boxes, long edit boxes, radio buttons, check boxes, and drop-down list boxes. Enabled by default, this option reinforces current save warning behavior. Currently, it has the system issue a save warning for the field if the user changes the value and attempts to exit the page before saving. In certain cases, however, it may not be necessary for the system to issue a save warning. For example, you may have a drop-down list box that contains a list of links to another page. If the user selects a link from the field but does not make any other changes to the page, it is not necessary to issue a save warning. By disabling this option for a field, you override the save warning for this field alone.

This option is also available for the button or link control and the grid control, but it is disabled by default to reinforce current save warning behavior.

Word Wrap for Long Words

The Use tab of the Long Edit Box Properties dialog box includes a new setting that wraps long words that do not contain spaces—such as long URLs—in a page field at run time. This setting is only necessary if end users are running PeopleSoft applications on Internet Explorer (IE) 5.5 only. The word wraps to the length of the field set at design time. Other browsers automatically stretch the width of the page to accommodate the longer text. This option has no impact at run time for applications running on browsers other than IE 5.5. This setting is cleared by default.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Application Designer, “Creating Page Definitions”

See “*Troubleshooting Browser Limitations*” on Customer Connection. (www.peoplesoft.com, Customer Connection, Support, Documentation, Documentation Updates, PeopleTools, Browsers)

Fixed Height Attribute for Grid Control

The appearance of existing grids may change based on a fix applied in this release to the Fixed Height (number of rows) attribute on the Grid Properties, Use tab. Modifications were made to the grid generation code to generate blank, dummy rows to pad out the grid to the fixed number of rows set in the occurs count.

Note, however, that there is no guarantee that the grid footer will display at runtime in exactly the same place every time since the height of a row may change depending on what data is in the row. For simple grids, the grid should display as expected.

See *PeopleTools 8.44 PeopleBook: PeopleSoft Application Designer*, “Using Page Controls,” Setting Grid Use Properties.

Component Definition Enhancements

In addition to a new wider dialog box for the component definition properties, the PeopleTools 8.44 release contains a new series of settings on the Internet tab. These appear in the Pagebar group box. The settings enable you to activate or deactivate the Help and New Window links, and they include two new settings for this release, Customize Page and Copy URL. These links appear at the top of every component page or PeopleTools page. You can disable all settings by using the Disable Toolbar setting. You can also enable or disable any setting using PeopleCode.

Help Link

Opens the online help PeopleBook entry for the current page.

Copy URL Link

Copies the current page URL to the clipboard. The copied URL includes page, action, and search key information to appear in the context of the portal, if the user passed through the portal. If the user did not pass through the portal, then only the page appears without the portal frames.

This option adds a small HTTP button to the pagebar.

New Window Link

Opens a new browser window with the search page for the current component. Users can view or enter data in the new window.

Customize Page Link

Opens the Page Customization page, which enables the user to control the initial display of the component. This option enables the user to:

- Select the initial page in the component to be displayed.
- Save the state of the expanded and collapsed sections.
- Save the state of the View All settings on the page for grids and scroll areas.
- Customize the page field tabbing order.

Users can also share their settings with other users or copy existing settings for the component from another user.

You can enable or disable any of these options using PeopleCode.

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Application Designer, “Creating Component Definitions,” Setting Internet Properties

PeopleTools 8.44 PeopleBook: Using PeopleSoft Applications, “Setting User Preferences”

Change Packager

New with the PeopleTools 8.44 release is the Change Packager feature. This tool enables you to easily package your own application customizations when migrating from one release to the next. Combined with PeopleSoft Change Assistant (also new with the PeopleTools 8.44 release), Change Packager significantly reduces the complexity and time involved in updating an implementation.

Using the Change Packager feature for your updates is a multistep process.

To use Change Packager:

1. Create a change project, adding all new items for the application changes to the database for the update and setting the appropriate update IDs and prerequisites, if applicable.

Change projects replace the former maintenance projects. Likewise, the Update IDs and Pre-Requisites tabs in the Project Properties dialog box replace the Incidents and Dependencies tabs from previous PeopleTools releases.

2. Create file reference and file type code definitions if you have individual files that need to be packaged with the project.

File references and file type codes are two new definition types for the PeopleTools 8.44 release to support Change Packager.

3. Create the change package, which copies the project to a file, generates a PeopleSoft Change Assistant template and documentation, creates the Data Mover scripts for non-managed objects, and packages the referenced files.
4. Finalize the change package, to perform validations on the change package and create a zip file of the change project and all its archived files.

See *PeopleTools 8.44 PeopleBook: PeopleSoft Application Designer*, "Using Change Packager."

See Also

PeopleTools 8.44 PeopleBook: PeopleSoft Change Assistant

PeopleSoft Application Engine

The following changes have been made to PeopleSoft Application Engine for PeopleTools 8.44.

Disabling Recycle Count on Error

If the following conditions occur, the PeopleSoft Application Engine sets the Recycle Count to 0 in the PSAESRV section (Application Engine Tuxedo Server) of the Process Scheduler configuration file (PSPRCS.CFG):

- The PeopleSoft Application Engine server (PSAESRV) recycles, showing the following message in the PeopleSoft Application Engine Server log file (APPSRV_<mmdd>.LOG):


```
Recycling server after "NN" services
```
- And the following error message also occurs in that log file:


```
Failed to establish RunAeProgAsync service context for user XXXXXX
```
- And the following error message occurs in the PeopleSoft Process Scheduler log file, (SCHDLR_<mmdd>.LOG):


```
Process Scheduler encountered an error sending the request to the AE Tuxedo Server
```

The PSADMIN utility provides an interface for editing the PSPRCS.CFG file.

PeopleSoft Pure Internet Architecture for PeopleSoft Enterprise

There are several enhancements to the underlying architecture of PeopleTools 8.44 that increase end user productivity and improve the PeopleSoft user experience overall. These features include:

- **Page customizations**

These enable users to tailor their transaction pages to specific business processes and personal data entry style. A Customize Page option is available for most pages. This developer-configured setting offers users the option to:

- Control the initial page display, such as which page in a component to display first or whether to save the state of expanded or collapsed sections or View All settings for a grid or scroll area.

- Change the tabbing order of page elements to match the user's data entry needs.
- Copy, share, and delete all page customization settings.
- **Grid customization sharing**

The existing grid customization page has been enhanced to include the ability for users to share their customization settings with other users or to copy and use the customizations created by another user.
- **Copy URL**

This setting copies the current page URL to the clipboard. The copied URL includes page, action, and search key information to appear in the context of the portal, if the user passed through the portal. If the user did not pass through the portal, then only the page appears without the portal frames. The Copy URL feature appears as a small HTTP button in the pagebar.
- **New look**

There is a slightly new look and feel to PeopleSoft applications. Enhancements have been made to the signon page, the menu pagelet, and various icons throughout the system to make them more visually appealing. Content references and menu items appear more prominently in the menu pagelet, and they are more easily accessible.
- **Language support**

The PeopleSoft system now supports both Polish and Bahasa Malay.

See Also

PeopleTools 8.44 PeopleBook: Using PeopleSoft Applications

PeopleCode

The following are the updates for the PeopleCode language for release 8.44.

New Classes

The following new classes have been added for PeopleCode:

- Crypt class.
- Universal queue classes.
- PrcsApi class (as part of the ProcessScheduler class).
- Content reference links class (as part of the PortalRegistry classes).
- Worklist class (as part of the Notification classes).
- Abstract classes (as part of Application classes).

See Also

PeopleTools 8.44 PeopleBook: PeopleCode API Reference

Editor Changes

Color-coding has been added to the PeopleCode editor. You can control how PeopleCode appears in an Application Engine program, a SQL definition, an HTML definition, or regular PeopleCode. You can also control the word wrap features—that is, whether the code wraps to a window or to a specific number of characters. Also, many shortcut keys have been added to the editor.

In addition, in the PeopleCode Editor, commented out text cannot exceed a maximum of 16383 characters.

See Also

PeopleTools 8.44 PeopleBook: PeopleCode Developer's Guide

Updates to Functions and Meta-SQL

This section discusses the general updates to the PeopleCode language.

See *PeopleTools 8.44 PeopleBook: PeopleCode Language*.

Deprecated Functions for Global Technologies

All the functions specifically created for dealing with double-byte characters (LenB, FindB, CodeB, and so on) are deprecated. Use the original version of these functions (Len, Find, Code, and so on) instead.

GetNextNumberWithGapsCommit Function

The GetNextNumberWithGaps function has been deprecated. Future applications should use the GetNextNumberWithGapsCommit function instead. The GetNextNumberWithGapsCommit function can be used in any PeopleCode event. It also doesn't tie up system resources by locking table rows.

Message Functions

The GetSubContractInstance, GetPubContractInstance, and GetPubInstance functions have been deprecated and replaced with the GetSubXmlDoc, GetPubXmlDoc, and GetPubHeaderXmlDoc functions, respectively.

StoreSQL Function

You can now associate an owner ID as well as a description with a SQL definition when you use the StoreSQL function.

Transfer Function

The Transfer function cannot be used with Application classes or internet scripts.

%COALESCE

You cannot use bind parameters with %COALESCE meta-SQL.

%TimeAdd

%TimeAdd can be used in dynamic and SQL views.

%TrimSubstr

The following note was added to the %TrimSubstr meta-SQL:

If you trim a string of blanks, an empty string is returned on all database platforms except Oracle, when a string of a single blank is returned.

New Functions and System Variables

The following new built-in functions and system variables have been added:

- CreateWSDLMessage
- DetachAttachment
- GetArchPubHeaderXmlDoc
- GetArchPubXmlDoc
- GetArchSubXmlDoc
- GetNextNumberWithGapsCommit
- InboundPublishXmlDoc
- LogObjectUse
- SetComponentChanged
- %Language_Base
- %Language_Data
- %Language_User

See Also

PeopleTools 8.44 PeopleBook: PeopleCode Language Reference

Updates to Methods and Properties

This section discusses the general updates to the PeopleCode classes.

See *PeopleTools 8.44 PeopleBook: PeopleCode API Reference*.

Application Classes

You can't use Application classes with either XmlDocument or SOAPDoc objects.

Array Class

The new parameter *sizehint* was added to the Join method. This parameter enables you to specify a hint to the Join method about the resulting size of the string. This can improve performance if your application is concatenating a large number of strings.

Field Class

The new property SetComponentChanged was added.

Java Class

PeopleSoft supports Java version 1.4.1 for all its platforms.

Page Class

Support for the pagebar functionality was added to the Page class.

PortalRegistry Classes

In addition to the content reference links, additional folder navigation control was added to the PortalRegistry and folder classes.

Query Classes

You can now perform more advanced searches for both queries and query records using the API.

Record Class

The new method Save was added.

Rowset Class

The new property SetComponentChanged, was added.

Tree Class

For the LeafExists method, if the node isn't expanded the database is searched for more information.

Internet Technology

This section discusses new and changed features for PeopleTools 8.44 internet technology.

Web Profiles

New in PeopleTools 8.44, a web profile is a named group of configuration settings that the portal applies throughout a PeopleSoft system to control all portal-related behavior. Web profiles replace and enhance the settings that were previously configured by editing several text files. They use a PeopleSoft Internet Architecture interface that makes the configuration process easier, more versatile, and more straightforward. The following web profiles are predefined and delivered with the PeopleTools base portal:

- DEV

The DEV web profile provides basic portal functionality for development, including trace and debug settings appropriate for development. The security properties for this profile enable public access.

- TEST

The TEST web profile uses the same settings as the DEV web profile, except that fewer trace and debug properties are enabled, and public access is disabled.

- PROD

The PROD web profile uses the settings most commonly needed in a production environment that authenticates users.

- KIOSK

The KIOSK web profile uses the same settings as the PROD web profile, except that the security properties enable public access, and browser caching is disabled.

Additional web profiles may be delivered as part of your PeopleSoft Enterprise Portal or application portal pack. You can use one of the delivered web profiles, or define your own.

Specifying an Initial Web Profile

As you perform the PeopleSoft Internet Architecture setup procedure for your system, you're prompted to specify which web profile to apply to your portal. The default web profile is DEV.

You can specify any of the delivered profiles, or you can enter a different profile name. In that case, the portal is set up to use a profile by that name. If a profile by that name doesn't exist in the database, internal default settings are used until you sign in to the portal and create a profile with that name. The portal then automatically configures itself according to those settings.

Note. The internal default settings are not the same as the DEV profile. Don't modify any of the delivered profiles. That way, you always have access to unmodified reference versions. You can make a copy of any profile and modify it, or define a new profile instead.

Modifying Web Profile Settings

You modify a web profile using the Web Profile Configuration component, which includes pages for the following categories of properties:

- General properties.
- Portal security.

- Virtual addressing.
- Cookie rules.
- Caching.
- Debug options.
- Look and feel.

Note. *PeopleTools 8.44 PeopleBook: Internet Technology* includes an appendix named “Understanding Changes in Portal Configuration Settings,” which provides a complete listing that maps PeopleTools 8.43 portal settings to the current PeopleTools web profile settings.

See Also

PeopleTools 8.44 PeopleBook: Internet Technology, “Configuring the Portal Environment,”
Configuring Web Profiles

Site Name Character Sequences to Avoid

Certain character sequences can generate errors in the site name of a PeopleSoft portal URL. When you set up PeopleSoft Internet Architecture, specify the name of your portal website with the following in mind:

The site name can include underscores (_), but an underscore cannot be followed by a numeric character or the string *newwin*. For example, don't use *my_site_3* or *my_newwin_site*. Instead, use *my_site_three* or *my_bignew_site*.

Menu Folder Navigation

By implementing menu folder navigation, you change the behavior of a folder's menu name in the navigation pagelet. Instead of expanding the menu to reveal its child entries, clicking the menu name opens a specified content reference in the target content region and expands the menu to show the navigation path to that content reference.

Note. If you specify a content reference that's hidden from portal navigation, the folder navigation occurs, but the menu name that you click remains highlighted. Even with folder navigation enabled, you can still click the icon to the left of the menu name to expand the menu without triggering navigation.

To implement folder navigation, you enable site-wide folder navigation and specify the content reference in the portal's general settings. Doing so enables folder navigation for all folders. However, you can subsequently disable this feature in the content reference definition for individual folders.

If you don't specify a folder navigation object for an individual folder, the one you specify for the portal is used instead. If you specify a folder navigation object for a folder, that folder is used instead of the one specified for the portal.

See Also

PeopleTools 8.44 PeopleBook: Internet Technology, “Administering Portals,” Managing General Portal Settings

Content Reference Links

PeopleSoft portals store content references based on their URLs, so you can't register two content references that specify the same URL. Content reference links overcome this limitation by enabling you to define multiple menu items that invokes a given URL.

You can position a content reference link wherever you want on the portal menu, and it looks and behaves as any other content reference. You define a content reference link as you do any content reference, but you specify a usage type of **Content Reference Link**.

Instead of specifying a URL for the content reference link, you specify an existing content reference as its destination. That destination content reference already specifies a URL, so at run time, clicking the content reference link entry on the portal menu connects to the destination content reference, which invokes its URL.

A content reference link enables you to connect users to an existing content reference using a different navigation, possibly with different properties in effect than on the original. The content reference link initially takes its properties from the selected destination, but you can override almost every property except the URL of the destination.

A content reference link can connect to two types of content references:

- A content reference of usage type **Target**.
- Another content reference link.

By connecting to another content reference link, you can create a chain of redirection, which always ends in a Target content reference. In this way, you don't need to know the ultimate destination when you define the link, and you can duplicate the property settings of the content reference link to which it connects, rather than those of the ultimate destination.

See Also

PeopleTools 8.44 PeopleBook: Internet Technology, “Administering Portals,” Administering Content References

Content Reference Attributes

Each content reference in a PeopleSoft portal is defined by the settings on a Content Ref Administration page, which includes the Content Reference Attributes region.

Content reference attributes provide a framework to specify and store freeform information about a content reference. For example, you can use content reference attributes to specify and store keywords, help information, and related links for content references. In addition, portal-aware applications can use content reference attribute information for application-specific processing. Portal-aware applications are those that:

- Have information about the portal registry and API.
- Can obtain information from a content reference.
- Are able to access a content reference and perform some action with the information.

PeopleSoft Enterprise Portal and the PeopleSoft base portal are portal-aware applications, and each is delivered with support for several predefined content reference attributes.

The PeopleSoft base portal recognizes the following content reference attributes:

Attribute Name	Description
<i>RELINK</i>	Use this attribute to create related links for the content reference.
<i>PSTIMEOUT</i>	Use this attribute to specify how long the portal should wait for a pagelet to load before it treats the pagelet as unavailable.
Name of a default homepage object or image	Use this attribute to override a default HTML object or image used for homepage components, such as tabs and pagelets, by providing the name of an alternative HTML object or image. Note. You can override only a specified set of homepage objects and images.
<i>IMAGE_BIND_12</i> to <i>IMAGE_BIND_26</i>	Use these attributes (numbered from 12 to 26) to insert additional custom images on a homepage tab.
<i>PSCACHECONTROL</i>	Use this attribute to implement caching for individual pagelets and targets, based on user, role, or application.
<i>PORTAL_ENCODING_OVERRIDE</i>	Use this attribute to override the character set encoding used by the content reference.

For information about the content reference attributes recognized by PeopleSoft Enterprise Portal, refer to the *PeopleSoft 8.8 Enterprise Portal PeopleBook*.

See Also

PeopleTools 8.44 PeopleBook: Internet Technology, “Administering Portals,” Administering Content References

Role-Based Security

When you define a portal content reference for which the URL type is PeopleSoft Component or PeopleSoft Script, the content reference security is always inherited from the security settings of the referenced component or script.

However, when you define a content reference of any other type, or a folder reference, you can specify the type of security to apply, just as you can with a PeopleSoft component.

In PeopleTools 8.44, you can now base non-inherited object security on roles as well as permission lists. You can specify any combination of roles and permission lists to provide content reference or folder security.

Synchronizing Portal Object Security

The hierarchical relationships and dependencies between objects in the portal registry determine the security settings that each object must have. The portal does not work correctly if these security relationships aren’t maintained. Here are some examples of these relationships:

- A folder that is not public or hidden must have at least the same level of access as its immediate child objects (folders, content references, and content reference links).
- A content reference link must have exactly the same level of access as the object (content

reference or content reference link) to which it links.

- A content reference that represents a PeopleSoft component or iScript must have exactly the same level of access as the object it represents.

When you move a content reference to a new location in the portal objects hierarchy (or if you create a new folder or content reference and apply security to it), its security settings are cascaded up to its new parents, and all the way up to the root folder. In addition, when you move a folder, its security settings (not including security inherited from a subordinate object) are cascaded up to its new parent, and all the way up to the root folder. In both cases, this behavior ensures that the folder or content reference is accessible in its new location.

However, portal object security settings can become unsynchronized when you move portal objects from one database to another using the Project Copy feature in PeopleSoft Application Designer. When you merge projects this way, if the projects contain any portal objects with identical names, the security settings of the portal objects in the last project copied overwrite the security settings of portal objects copied earlier. Also, when a copied portal object doesn't overwrite an existing object, it changes the structure of the resulting portal registry hierarchy.

Use the Portal Security Synchronization page to reinstate the correct security relationships between objects in the portal registry after you copy a project that contains portal objects. The Portal Security Synchronization page enables you to execute the Application Engine program PORTAL_CSS from the standard menu navigation.

See Also

PeopleTools 8.44 PeopleBook: Internet Technology, “Administering Portals,” Managing Folders and Content References

Content Reference and Menu Queries

The PeopleSoft system provides several automated queries for retrieving content reference security details, menu security details, menu item details, and folder structure information.

In the security administration components, you can use query links to discover the content references to which a given user, permission list, or role has access. Each query provides a different degree of detail about the properties of the content references, including:

- Content reference access by user ID, permission list, and role.
- Portal information for each accessible content reference.
- Menu, component, and market information for each accessible content reference.

When you click one of the content reference query links, a page appears in a new window, containing a grid with the information described for each content reference.

In the Portal Administration component, several pages are dedicated to displaying comprehensive information about portal menus, including:

- Menu object name.
- Associated node.
- Associated component.
- Associated product.
- Usage type.

- Navigation path.
- User IDs with access.
- Permission lists with access.
- Roles with access.
- Menu folder structure.

See Also

PeopleTools 8.44 PeopleBook: Internet Technology, "Administering Portals," Administering Content References

PeopleTools 8.44 PeopleBook: Internet Technology, "Administering Portals," Reviewing Menu Item Information

Pagelet Timeouts

PeopleSoft portal technology assembles a homepage by sequentially retrieving content for all the pagelets referenced on the homepage. Each pagelet takes a variable amount of time to load, depending on a variety of factors. The pagelets can all have relatively quick average load times, but any pagelet might be excessively slow on occasion. This can disproportionately skew the total time required to retrieve all the pagelets. As a result of such high retrieval times, the total time to service the homepage request can be unacceptable to the end user, and for practical purposes the pagelet is unavailable.

You can anticipate the unavailability pagelets by specifying a timeout period during which each pagelet must load. You specify a pagelet timeout as a content reference attribute (PSTIMEOUT) on the pagelet's Content Ref Administration page. If the pagelet still isn't available when the timeout interval expires, the portal loads the homepage without that pagelet. This improves portal homepage performance by enabling the system to present the homepage quickly in spite of an individual pagelet's unavailability.

See Also

PeopleTools 8.44 PeopleBook: Internet Technology, "Administering Portal Homepages," Configuring Pagelet Timeouts

Caching

Because of numerous small enhancements, PeopleTools 8.44 caching functionality is easier to implement, more versatile, and more efficient than in previous releases.

You can target portal caching to a specific pagelet, template, portal, or web server. You can also apply caching based on content reference type or browser type. In some cases, you can specify the scope of the caching to be private, by role, or public.

Some types of caching take place on the portal web server, and others are applied at the browser without requiring individual browser configuration. You can make various caching settings in the Web Profile Configuration component, on a personalization page, or in a template HTML element. You can apply pagelet caching using the PSCACHECONTROL content reference attribute.

With server caching, the cached data is stored on the portal web server. When a user's browser requests a given piece of information from the portal, the server transmits the currently available data. The currency of the data provided depends on whether the server has refreshed the data since the last request. This is controlled by the server-based caching criteria that you define for the data.

When browser caching is enabled, you can manually refresh the browser. This reloads the entire browser HTML content from the portal server. However, it doesn't update the information that's cached on the server.

Caching Personalizable Pagelets on the Web Server

When a user personalizes a homepage pagelet, the result should be visible only to that user, and therefore should be cached only for that user. To ensure this behavior, as soon as the user attempts to personalize the pagelet, regardless of the caching scope you originally specified for it, the portal automatically changes the caching scope to apply on a *private* basis. It maintains the cached pagelet independently for that user.

Important! This automatic scope change applies only to the user personalizing the pagelet and to the portal on which the pagelet is personalized. On other portals, and for other users, the originally defined caching scope for that pagelet still applies. If the personalizations aren't stored as portal-specific data, then the personalizations for a pagelet originally defined with wider caching scope can become visible to others accessing the same site through another portal.

Therefore, when developing personalizable pagelets, it's important to ensure that stored pagelet personalization metadata is keyed by both user ID and portal name, so that you can populate the pagelet independently for each portal. This prevents user personalizations on one portal from being cached and visible to a larger audience on another portal.

See Also

PeopleTools 8.44 PeopleBook: Internet Technology, "Using Portal Caching Features"

Support for JSR 168 Standard Portlets

JSR 168 is an emerging standard for portals running in a Java 2 Platform, Enterprise Edition (J2EE) architecture. It is designed to enable portlets and portals from different vendors to interoperate. It defines a set of APIs that address aggregation, personalization, presentation and security. For further information on JSR 168, please refer to <http://www.jcp.org/en/jsr/detail?id=168>. It specifies content definitions much like pagelets, called *portlets*, that present portal content defined according to the JSR 168 standard. Portlets are Java-based web components that you can register in the PeopleSoft portal just as you register pagelets. The PeopleSoft portal includes a new portlet engine to manage the registered portlets.

Both HTML templates and frame templates support portlet content. Portlets generate fragments of markup (such as HTML, Extensible Hypertext Markup Language, and Wireless Markup Language). The PeopleSoft portlet engine manages and invokes portlets using Java programs, which combine markup fragments generated by different portlets into a portal page.

You develop your own XML-based JSR 168 compliant portlets, then register and deploy them using the PeopleSoft portal registration components.

JSR 168 support depends on several third-party products, which are delivered as part of the installed PeopleSoft base portal:

- A J2EE-compliant servlet engine (BEA WebLogic and IBM WebSphere both qualify).
- Apache's open source Xerces XML parser.
- A regular expression package in Java under the GNU free use license.
- Jtidy from the World Wide Web Consortium (open) under a free use license.

PeopleSoft Compliance with JSR 168

PeopleSoft portlet engine implements an extensive set of JSR 168 requirements. The primary divergence of support is in the areas of security, the JSP tag library, user information attributes, and a few packaging and deployment features.

The PeopleSoft JSR 168 portlet engine supports:

- The majority of JSR 168 API classes and their methods.
- All of the required window states (custom window modes are not supported).
- Caching portlet content using the PSCACHECONTROL content reference attribute.
- All of the required portlet modes.
- The JSR 168 portlet application deployment descriptor (portlet.xml).

The PeopleSoft portlet engine doesn't support persistence using the *store* method of the JSR 168 PortletPreferences class. However, you can install a Java plug-in that implements a substitute *store* method, which does handle persistence of user personalizations.

The PeopleSoft security model is significantly different from the J2EE security model used by the JSR 168 standard, although no less effective. PeopleSoft security applies to JSR 168 portlets just as it does to PeopleSoft pagelets. In addition to standard security, you can also install your own authentication handler as a Java plug-in.

The PeopleSoft portlet engine does not provide values for user information attributes that are specified by the JSR 168 standard. However, the portal does provide the following user information attributes instead:

- user.loginid
- user.language
- user.PS_TOKEN
- user.roles
- user.PortalServletURI

The JSR 168 specification provides that if a portlet throws an exception, the portal can display an error page for the entire portal page, or just for the portlet frame. The PeopleSoft portal displays only the error page for the portlet frame.

The PeopleSoft portlet engine doesn't support portlet application archive files, portlet application replacement, or the JSP tag library as defined in section PLT.22 of the JSR 168 specification.

See Also

PeopleTools 8.44 PeopleBook: Internet Technology, “Working with JSR 168 Portlets”

Ending a User Session

For security reasons, it's important that you sign out when you're finished with your PeopleSoft session, rather than simply closing all browser windows. If you don't sign out properly, other users may be able to access your cached homepage from another portal.

PeopleSoft Global Technology

The following enhancements and updates were made to Global Technology in PeopleTools 8.44.

Support for Polish and Danish

Support for two additional languages, Polish and Danish, has been added for this release.

Support for Unicode 3.0 on Sybase

In this release, Unicode 3.0 on a Sybase database is supported. This enables you to store all PeopleSoft-supported languages in one database. All characters supported by Unicode 3.0 are supported in a Unicode Sybase database.

Two new character types are supported for Sybase:

- UNIVARCHAR is Sybase's UTF-16 storage datatype. It corresponds to CHAR in a non-Unicode database.
- TEXT corresponds to LONG CHAR in non-Unicode database.

See also

PeopleSoft 8.44 PeopleBook: Global Technology, “Selecting and Configuring Character Sets and Language Input and Output,” Validating Field Length

Unicode Support for Crystal Reports 9

Unicode support for Crystal Reports 9 allows you to run a single Microsoft Windows batch server for all languages while maintaining language-specific output. In addition, a new Crystal Reports function, PSToWords(), is included. This function, which translates check amounts into word form in any supported language, is not tied to the installed language of the Crystal Reports Designer (as is the Crystal ToWords() function).

To enable PSToWords in Crystal Designer, copy the three psicu* dll files from PS_HOME\server\bin\winx86 to the directory where crw32.exe is installed.

See also

PeopleTools 8.44 PeopleBook: Crystal Reports for PeopleSoft, “Using Crystal Reports,” Working with Multiple Languages

Improved Support of International PDF Output from SQR

Support for international text in PDF output from SQR is improved for this release. This is accomplished by improved font support architecture in SQR, allowing you to generate Eastern European and Thai languages in PDF report output out of the box in addition to the Western European, Chinese, Japanese, and Korean languages supported from previous releases.

See also

PeopleSoft 8.44 PeopleBook: Global Technology, "Reporting and Analyzing Global Data," SQR for PeopleSoft Globalization

Known Issues

Verity Search Limitations

The following are limitations on Verity searches:

- Polish PDF spidering is not supported.
- Thai collections using the uni locale require Verity patch VDK5016 or later.
- Verity Middle Eastern and Central European locales are available on Windows and Solaris only.
- The Verity japanb locale does not support folding between Hiragana and Katakana or between Kana and Romaji.
- Japanese FREETEXT queries with user dictionary entries that are substrings of other user dictionary entries require Verity patch VDK5012 or later.

Verity user documentation now ships with PeopleSoft.

Norwegian Spellcheck

The Norwegian spellcheck dictionary is based on Bokmål.

Unicode Strings do not Display Properly when Used as Field Labels in Page Designer Grids

If your Unicode strings display improperly (as black boxes) when used as field labels in Page Designer grids, use the following workaround to display them correctly:

1. Use the Configuration Manager to specify the font used to render the various dialogs of the Page Designer. The font specified there will only be used by the Page Designer for that purpose. Check to ensure that your System Default Style is set properly for Unicode. Navigate to Application Designer, Tools, Miscellaneous Definitions, Styles, select System Default Style, and then select Arial Unicode MS.
2. Use the Stylesheet Designer to modify the PTSTYLEDEF stylesheet. For each style class of that stylesheet that corresponds to a page field type or the label for that type of page field (PSCHECKBOX, PSDROPDOWNLIST, PSDROPDOWNLABEL, PSEDITBOX, PSEDITBOXLABEL, etc.), set its font to the one that you wish to have used at design-time. Note that this will, of course, also determine impact the font used at runtime. Furthermore, for a grid column's label, the relevant styleclass are not PSGRIDCOLUMNHDR but rather that label styleclass for that type of page field.

Note. The label displays properly at runtime; this workaround refers only to field labels.

Embedded Third-Party Products

Third-party products have been upgraded to their latest stable versions. This upgrade ensures that you have the latest fixes across all layers of the PeopleSoft technology stack. In addition, it reduces the likelihood of multiple upgrades to underlying technologies during the PeopleTools 8.44 release cycle.

BEA Tuxedo 8.1

BEA Tuxedo 8.1 is embedded into PeopleTools 8.44. You are required to upgrade to this version of Tuxedo.

At this time, PeopleTools 8.44 does not use any of the new features in BEA Tuxedo 8.1.

Compression Error on Linux systems during Tuxedo installation Issue

There is a known issue when installing Tuxedo 8.1 on Linux. If you hit this issue you will see the following error message at the beginning of the Tuxedo installation

```
The included VM could not be uncompressed. Please try to download
the installer again and make sure that you download using 'binary'
mode. Please do not attempt to install this currently downloaded
copy.
```

This error occurs because the Tuxedo installation program uses the 'uncompress' program. You probably do not have uncompress installed on your system. Use the following procedure as a workaround.

To install Tuxedo after receiving the compression error:

1. Create a new script containing the following content and call it 'uncompress'.

```
#!/bin/bash
exec gzip -d "$@"
```

This file will just point to 'gzip' which you can rely on being installed on your system. I think it is part of the core package. This new 'uncompress' will get invoked by the Tuxedo 8.1 installer.

2. Save this file as 'uncompress' to /bin or some other directory that is contained your \$PATH.
3. Change the file access privileges to be executable using 'chmod'.
4. Invoke the Tuxedo 8.1 installer as normal.

Disk Space Alert on Tuxedo Installation Issue

If there is insufficient disk space on a machine during a Tuxedo installation, you encounter the following message:

```
=====
Not Enough Disk Space
-----
```

Warning!

This installation requires 203.17 MB of free disk space, but there are only 159.63 MB available at:

```
/home/mjohnst2/beatest_linux/tuxedo81
```

```
Please free some disk space and re-run this installer...
```

In this case, you should exit the installer (if not the installer has not already automatically terminated) and verify that there is sufficient disk space for installation—that is, 250 MB or more. If there is sufficient disk space, you should then export the environment variable as follows:

```
export CHECK_DISK_SPACE=OFF
```

Be sure to restart the installation.

Web Server

BEA WebLogic Server 8.1 SP1 and IBM WebSphere Server 5.1 Network Deployment are embedded in PeopleTools 8.44. You are required to upgrade to the newer version of WebLogic or WebSphere, because this version includes several bug fixes and JRE/J2SE 1.4.1. This results in improved performance. WebSphere 5.1 eliminates the differences between AEs/AE in WebSphere 4.0.x.

At this time, PeopleTools 8.44 does not use any of the new features in BEA WebLogic Server 8.1 SP1 or IBM WebSphere Server 5.1 Network Deployment.

WebSphere Server Known Issues and Workarounds

This section lists known issues and workarounds for WebSphere.

PIA Installation Failure on WebSphere

During a PIA installation on Windows, you will receive a PIA installation failure message if WebSphere is installed on the E drive. When this happens, you need to open `PS_HOME/webserv/piainstall.log` to verify if PIA was in fact installed successfully.

Ignore the PIA installation failure message at the end of the PIA installation if you see the following message:

```
ADMA50131: Application peoplesoft903a installed successfully.
```

Virtual Hosts

PeopleSoft Internet Architecture (PIA) gets deployed in the `default_host` Virtual Host and therefore, must not be deleted.

To view the Virtual Host settings, go to: Admin Console, Environment, Virtual Hosts.

HTTP Transports

You can perform the following operations:

- Modify ports in HTTP Transport.
- Add new HTTP Transport ports.

Note. Do not delete HTTP Transports. Deletion of HTTP Transports is not supported.

To view HTTP Transport settings, go to: Admin Console, Servers, Application Servers, {servername}, Web Container, HTTP Transports.

Running Applications Using WebSphere

Please be aware that you cannot run more than one PeopleSoft application at a time using a single WebSphere server.

Virtual Host Named default_host

Do not delete Virtual host named default_host. PeopleSoft Internet Architecture uses default_host. If you delete default_host, PeopleSoft Internet Architecture cannot be installed. Default_host is reserved for PeopleSoft Internet Architecture.

Duplicate Hostname and Port as *

Problems can arise when you have a duplicate hostname and a port as * in the default_host virtual host alias.

You can delete duplicate entries and just keep one pair of hostname and port as *.

To delete duplicate entries:

1. Open the Admin Console at the following URL: http://<machine_name>:9090/admin.
2. Log in as any user.
3. Navigate to Environment, Virtual Hosts, default_host, Host Aliases.
4. Delete duplicate entries of hostname and ports as *.

Java Processes Running During WebSphere Installation

It is optional to stop Java processes before you install WebSphere.

IBM HTTP Server iKeyMan Tool

The IBM HTTP Server iKeyMan tool on Red Hat Linux Advanced Server 2.1 core dumps. Because iKeyMan tool core dumps while saving the KDB file through iKeyMan tool, you must use the following workaround to save it successfully.

To save iKeyMan tool on IBM HTTP Server on Red Hat Linux:

1. Export the following variable on Red Hat Linux Advanced Server 2.1 before you invoke iKeyMan.

```
export LD_PRELOAD=/usr/lib/libstdc++-libc6.2-2.so.3
```

2. Invoke the iKeyMan tool by executing the following:

```
/usr/local/ibm/gsk7_gcc295/bin/gsk7ikm_gcc295
```

iKeyMan of IBM Http Server Invokes iKeyMan of WebSphere

Apply iFix#PQ80440 from Customer Connection
ftp://ftp.peoplesoft.com/outgoing/PTools/websphere/51.Refer PeopleSoft-WAS-readme.txt to apply iFix.

Can't Start IkeyMan of IBM Http Server

When IHS_HOME/bin/ikeyman, is invoked, the following error is received
`/usr/opt/ibm/gskta/bin/gsk7ikm: not found.`

This error was noted on AIX 5.1 and indicates that the GSKit7 required to run iKeyMan is not installed. After IBM Http server and WebSphere installation , GSKit7 does not get installed , if xIC.rte is of version less than 6.0. If GSKit7 is not installed, then you won't be able to invoke iKeyMan in IBM Http Server.

Workaround:

1. Upgrade C++ runtime compiler to version 6.

For AIX 5.1, ensure that you have the xIC.rte 6.0 runtime. This is a prerequisite of GSKit7. You can download this runtime from <https://techsupport.services.ibm.com/server/aix.fdc>. Upgrade C++ runtime compiler to version 6 and then install gskit from WebSphere CD as root user.

2. Install gskit version 7 from WebSphere CD

- a. Copy /base/ihs from WebSphere 5.1 Base CD into temp directory.
- b. Update gskit.sh script Edit the script to take out the `2> /dev/null > /dev/null` for whatever platform you are installing on so you can see the output of the command on the command line.
- c. Now run the script (`./gskit.sh`) and make sure the gskit binary is in same path with the script.
 - On AIX the binary is:gskta.rte
 - On Linux:gsk7bas*rpm
 - On all other unix:gsk7bas
 - Solaris also requires:admin directory
- d. If the output requires to install xIC.rte v=6 i.e C++ runtime compiler to version 6, upgrade it and then re-install gskkit from the steps above.

Japanese Language Support on Red Hat Advanced Server Version 2.1

The Red Hat Advanced Server Version 2.1 GUI language selection menu displays two selections for Japanese: Japanese (eucJP) and Japanese (SJIS). Click Japanese (eucJP) to install and run the IBM WebSphere Application Server in a Japanese environment. Using Japanese (SJIS) is not recommended.

Administration Link in FirstSteps Window Fails to Open

Silent WAS install installs WAS at non-default ports. After the install, Admin console link in FirstSteps fails to open Admin console at non-default ports. Refer to PeopleBooks on steps to open WebSphere 5.1 Administration console, if Admin port is listening at non-default port.

WAS Silent Install Sets Up 19043 as HTTPS Port Instead of 19443

Refer to the list of port usage in WebSphere 5.1 Installation Guide.

Other Embedded Products

The following are other third-party products that have version changes:

- Crystal Reports for PeopleSoft (upgraded to version 9).
- Verity VDK (upgraded to version 5.01).
- Java 1.4.1

Crystal Reports for PeopleSoft to version 9.

Customers using Crystal Reports must upgrade to the supplied Crystal Reports for PeopleSoft version 9. Please refer to the Crystal Reports section for specific information relating to the features and benefits of this version.

Verity VDK to Version 5.01

As internet-enabled applications become more common, the need for robust, thorough, and flexible search functions has become ever-more critical. Verity and PeopleSoft have had a relationship for over three years, and Verity's search capabilities have been improved in this release with the inclusion of Verity's most recent release of its industry-leading search engine.

PeopleTools 8.44 bundles Verity VDK 5.01 (5.0.2 for HPUX). Previous PeopleTools 8.44 releases bundled Verity VDK 2.71B. The new VDK version is not compatible with the old version. As a result, applications in some product lines require new patches or bundles. Be sure to check for available fixes for your application(s) and apply any appropriate application patches or bundles for each product line, or contact the PeopleSoft Global Support Center. To utilize free text searching, you will have to perform a full rebuild of your search collections after the application patches are applied.

Java 1.4.1

The Entrust/Toolkit for Java was previously used for securing application messaging using SSL in prior versions of PeopleTools. The security features such as JCE, JSSE, and JAAS are now integrated into JRE/J2SE 1.4.1. PeopleTools 8.44 replaces Entrust and uses these new features instead.

Platform Support

This section discusses support for various operating systems and databases.

Operating System Support

The most significant enhancement to operating system support in PeopleTools 8.44 is the support of Red Hat Linux Advanced Server 2.1 on 32-bit Intel platforms for the entire PeopleSoft technology stack.

The support of Linux on 32-bit Intel hardware can provide lower cost deployment of PeopleSoft applications on commodity hardware. Support for Linux is delivered through a development partnership with IBM. IBM hardware and software are used as the reference implementation for PeopleSoft system testing and certification.

In PeopleTools 8.44, the minimum supported operating system releases are listed here. You must use these operating system versions or later:

- Sun Solaris 8.
- IBM AIX 5.1.
- Hewlett Packard HP-UX 11.11.
- Hewlett Packard Tru64 5.1.
- Microsoft Windows 2000.
- Red Hat Linux AS 2.1 32-bit.
- Red Hat Linux AS 2.1 64-bit (64-bit database server only).
- IBM z/OS 1.2 (database server and batch server only).
- Microsoft Windows 2003 Server 64-bit (64-bit database server only).
- Microsoft Windows 2003 32-bit support (limited to database-only server support for Oracle, DB2, and Microsoft SQL Server in PeopleTools 8.44).

Database Support

The following are significant changes to database support in PeopleTools 8.44:

- Support of IBM DB2 8.1 FixPack 4 on 32- and 64-bit Linux and Windows 2003 Server 64-bit.
- Support of Microsoft SQL Server 2000 64-bit on Microsoft Windows 2003 Server 64-bit.
- Support of Oracle 9i on 32- and 64-bit Linux and Microsoft Windows 2003 Server 64-bit.
- Unicode support in Sybase 12.5 (using 8K page size as a minimum).

In PeopleTools 8.44, the minimum supported database version is listed here. You must use these database versions or later:

- Oracle 8.1.7.4 and 9.2.0.2 for Unix and Microsoft Windows 2000.
- Oracle 9.2.0.2 for RAC (real application cluster) for Unix and Microsoft Windows 2000.

- 32-bit Microsoft SQL 2000 SP2 for Microsoft Windows 2000.
- Oracle 9.2.0.2 (32-bit) for Red Hat Linux Advanced Server 2.1 (32-bit); all PeopleSoft Internet Architecture tiers.
- Oracle 9.2.0.2 (64-bit) for Red Hat Linux Advanced Server 2.1 (64-bit); database-server-only certification.
- DB2 UDB 8.1 Fix Pack 4 (32-bit) for Red Hat Linux Advanced Server 2.1 (32-bit); all PeopleSoft Internet Architecture tiers.
- DB2 UDB 8.1 Fix Pack 4 (64-bit) for Red Hat Linux Advanced Server 2.1 (64-bit); database-server-only certification.
- DB2 UDB 7.2 for Unix and Microsoft Windows; no change from PT8.42/8.43.
- DB2 UDB 6.1 for z/OS; no change from PT8.42/8.43.
- Sybase 12.5.0.3 ESD #3 using 4K page size as a minimum; 2K is no longer supported.
- Informix 9.30.

Informix on Unix

PeopleCode Functions

The %GetNextNumberWithGapConnect() PeopleCode function will be inoperative on Informix if running AESVR on Unix.

MultiChannel Framework Servers

MCF servers are not supported for Informix databases on HP Unix.

Edit History

Date	Modification
December 17, 2004	Original version of PeopleTools 8.44 Release Notes posted.
February 13, 2004	Updated Server Tools information. Updated PeopleSoft Tree Manager information. Added PeopleSoft Application Engine information. Updated listing of PeopleCode functions. Updated Verity VDK 5.01/free text search information.
July 06, 2004	Added information to the Process Scheduler section related to the Max Concurrent field. Added information to the Crystal Reports 9.0 section related to issues with PDF output.

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