



PeopleTools 8.12 Process Scheduler Peoplebook

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PeopleBooks Contributors: Teams from PeopleSoft Product Documentation and Development.

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ABOUT THIS PEOPLEBOOK

Process Scheduler provides PeopleSoft applications with a user-configurable tool that integrates with PeopleSoft panels, PeopleSoft security, and PeopleCode functions. Through this integration, Process Scheduler enables users to request and monitor batch processes related to their PeopleSoft applications.

Audience

This book is intended for end users, developers, and administrators. Although this seems like a broad range, the book is actually divided by the intended audience. For example, there is a section just for the end user, the developer, and the administrator. For the most part, you really only need to read the section that pertains to the duties you perform at your site. In general, we recommend that you are familiar with the PeopleSoft interface, have a basic understanding of SQL and the client/server environment, and are familiar with the batch environment at your site. Any previous knowledge of COBOL and SQR will be very helpful.

Process Scheduler Basics covers the interface and major components of Process Scheduler. This section is recommended reading for all.

Process Scheduler for the End User guides you through submitting some sample process requests and explains the dialog boxes and pages you encounter.

Process Scheduler Development explains how to configure, maintain, and monitor the Process Scheduler Server Agent.

Process Scheduler Administration contains information to help you anticipate common problems with Process Scheduler. This is information that both developers and administrators can use.

Process Scheduler Report Distribution contains information to help you use, configure, maintain, and administer the Distribution Agent and Report Manager components

Before You Begin

To benefit fully from the information covered in this book, you need to have a basic understanding of how to use PeopleSoft applications. We recommend that you complete at least one PeopleSoft introductory training course.

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

Related Documentation

To add to your knowledge of PeopleSoft applications and tools, you may want to refer to the documentation of the specific PeopleSoft applications your company uses. You can access additional documentation for this release from PeopleSoft Customer Connection (www.peoplesoft.com). We post updates and other items on Customer Connection, as well. In addition, documentation for this release is available on CD-ROM and in hard copy.



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Typographical Conventions and Visual Cues

To help you locate and interpret information, we use a number of standard conventions in our online documentation.

Please take a moment to review the following typographical cues:

<code>monospace font</code>	Indicates PeopleCode.
Bold	Indicates field names and other page elements, such as buttons and group box labels, when these elements are documented below the page on which they appear. When we refer to these elements elsewhere in the documentation, we set them in Normal style (not in bold). We also use boldface when we refer to navigational paths, menu names, or process actions (such as Save and Run).
<i>Italics</i>	Indicates a PeopleSoft or other book-length publication. We also use italics for <i>emphasis</i> and to indicate specific field values. When we cite a field value under the page on which it appears, we use this style: <i>field value</i> . We also use italics when we refer to words as words or letters as letters, as in the following: Enter the number <i>0</i> , not the letter <i>O</i> .
KEY+KEY	Indicates a key combination action. For example, a plus sign (+) between keys means that you must hold down the first key while you press the second key. For ALT+W, hold down the ALT key while you press W.
Jump links	Indicates a jump (also called a link, hyperlink, or hypertext link). Click a jump to move to the jump destination or referenced section.

Cross-references

The phrase *For more information* indicates where you can find additional documentation on the topic at hand. We include the navigational path to the referenced topic, separated by colons (:). Capitalized titles in *italics* indicate the title of a PeopleBook; capitalized titles in normal font refer to sections and specific topics within the PeopleBook. Cross-references typically begin with a jump link. Here's an example:

For more information, see Documentation on CD-ROM in About These PeopleBooks: Related Documentation.

• Topic list

Contains jump links to all the topics in the section. Note that these correspond to the heading levels you'll find in the Contents window.



Name of Page or
Dialog Box

Opens a pop-up window that contains the named page or dialog box. Click the icon to display the image. Some screen shots may also appear inline (directly in the text).



Text in this bar indicates information that you should pay particular attention to as you work with your PeopleSoft system. If the note is preceded by **Important!**, the note is crucial and includes information that concerns what you need to do for the system to function properly.



Text in this bar indicates For more information cross-references to related or additional information.



Text within this bar outlined in red indicates a crucial configuration consideration. Pay very close attention to these warning messages.

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While we cannot guarantee to answer every email message, we will pay careful attention to your comments and suggestions. We are always improving our product communications for you.

CHAPTER 1

Process Scheduler Basics

PeopleTools Process Scheduler Manager is a centralized tool that enables application developers, system administrators, and application users to manage PeopleSoft batch processes. Using the PeopleSoft Internet Architecture (PIA), you can access a list of processes through a Web browser and queue and execute a process request. Process Requests using the Internet Architecture have the added functionality of new distribution options that enable you to distribute output in different formats (HTML, PDF, Excel, and so on) to other users based on their user ID or their role ID. You also can send reports as email to other users when they are done executing.

Process Scheduler enables you to perform the following tasks:

- Schedule recurring processes.
- Create jobs (groups of processes).
- Schedule a process request to run on any date or time interval that your business requires, such as monthly, daily, hourly, or even by the minute.
- Submit a job to run several processes, and, conditionally, schedule successive processes based on the status of a previous process in the job.

Process Scheduler Manager's primary role is to support the PeopleSoft application environment. With your PeopleSoft application, you have certain processes—programs, batch programs, reports, and so on—that you want to perform behind the scenes of your online system. Running reports, posting journal entries, loading benefit enrollment forms, and calculating payroll deductions are all examples of processes that you most likely want to perform independently of your PeopleSoft application.

Using Process Scheduler Manager can greatly streamline your business processes by enabling you to take advantage of the distributed computing environment on your site, whereby you can schedule performance-sensitive jobs to run on a powerful server while your online system is still available to end users.

You can schedule processes to run locally on a client workstation or remotely on a database server without having to exit the PeopleSoft system. And once a scheduled process begins, Process Monitor enables you to monitor the important details of PeopleSoft batch processes, such as where certain programs ran, where and when reports were printed, and what command-line parameters were passed to third-party programs with which Process Scheduler Manager interacts.

Here are some of the benefits Process Scheduler Manager offers:

- **System Efficiency.** Data-centric processes can run close to the database on high-powered servers. Non-data-centric processes can run anywhere.

- **Low Administration Overhead.** User accounts on servers are unnecessary. Users don't need to know additional passwords to run processes.
- **End User Productivity.** Users don't need to know the syntax of running a process. Workstations remain available for other tasks while a process runs in the background on a server. Once a process completes to success users can transfer directly to the related application pages from Report Manager.

Using This Book

In this book, we introduce you to Process Scheduler Manager, Process Monitor, and Report Manager, and after reading this book, you should be familiar with the following tasks:

- Streamlining your business with Process Scheduler Manager.
- Viewing reports and checking processes online.
- Distributing reports to the Web or to email.
- Integrating Process Scheduler Manager into your application.
- Setting up the table definitions that drive Process Scheduler Manager.
- Starting, stopping, and configuring the Process Scheduler Server Agent.
- Submitting and monitoring your process requests.
- Changing any process request options, as needed.

Most often, you are only concerned with and need to know how to complete one or two of these tasks depending, on your role in your company. For instance, you need to know how to monitor the process requests you've submitted, but you probably don't need to know how to set up the table definitions Process Scheduler Manager requires to successfully complete a job. On the other hand, if you're a developer, you need to know how to integrate the Process Scheduler Manager into your applications, but you probably don't need to know how to configure the Process Scheduler Server Agent.

Consequently, this book is divided into the following sections aimed at specific audiences:

- **Process Scheduler for the End User.** This chapter provides an overview of the three basic PeopleSoft components that enable you to efficiently manage your processes and their output: Process Scheduler Manager, Process Monitor, and Report Manager. If you are a casual user, you receive all the information that you need to submit and monitor process requests, as well as distribute and view the process output from Report Manager. PeopleSoft also recommends that administrators and application developers become familiar with the concepts discussed in this section to understand how most end-users interact with the Process Scheduler Manager.
- **Process Scheduler Development.** If you're an Application developer, use this chapter to learn how to set and create Process Types, Process Definitions, and Job Definitions to integrate Process Scheduler Manager into PeopleSoft applications.

- **Process Scheduler Administration.** This section provides information regarding configuring, administering, and troubleshooting the Process Scheduler Server Agent running on an application server, a database server, or a batch server. The information presented here is specific to Windows NT, although the general concepts apply to all operating systems. Any operating system anomalies are documented separately.
- **Process Scheduler Report Distribution** gives you all the information that you will need to set up your Distribution Node so that Process Scheduler Distribution Agent (Distribution Agent) can transfer all files generated from a process request to the Report Repository. This chapter is recommended for system administrator or application developers who are familiar with setting up Process Scheduler.



Process Scheduler Manager is intended for application developers, system administrators, and those who are familiar with the details of PeopleTools and/or PeopleSoft applications. If you are neither a system administrator nor highly knowledgeable about your organization's server configurations, we recommend that you work closely with your network operations staff to ensure that the Process Scheduler Manager system is properly configured.

Understanding Process Scheduler Components

Process Scheduler Manager is made up of several components that work in together to help you run your reports and processes off-line. After your job has been submitted, you use Process Monitor to check the status of your job, and then Report Manager to view the output of your job through your Web browser.

Process Scheduler Manager involves the interaction of the following separate components:



Depending on what your role is at your site, you might be concerned with only one or two of these components. Most end-users only need to be concerned with the very basic tasks of submitting a Process Request, checking its progress, and then viewing it in Report Manager.

Process Type Definitions

Process Type Definitions are the global definitions for processes. Select this from the menu to define or update process types.

Process Definitions

Process Definitions are the settings specific to a process. Use this option to define or update process definitions.

Job Definitions

Job Definitions enable you to group processes. Select this option to define or update job definitions.

Recurrence Definitions

These definitions describe the frequency of processes or jobs that run on a recurring basis, such as weekly or monthly. Select this from the menu to define or update recurrence definitions.

Server Definitions

A server definition refers to an instance of the Process Scheduler Server Agent. Select this menu option to define or update process server definitions.

Report Node Definitions

Select this option to define the Report Distribution Node including URL, the home directory, and FTP address. Use this to setup the parameters needed for the Process Scheduler Server to transfer reports and log/trace files generated from a process request to Report Manager.

Process System Settings

Select this menu option to view or change the last process instance number, as well as the system's default operating system.

Process Request

A Process Request enables you to submit a job or process to run. This component is commonly integrated into applications to support process requests made by selecting Run from PeopleSoft applications. The Process Request page enables you to specify such variables as where a process runs and in what format the process output is generated.

Process Scheduler Server Agent

The Process Scheduler Server Agent is primarily responsible for polling the Process Request table where Process Requests appear in a queue after you submit them. The Process Scheduler Server Agent is a process that runs on the server. It can run on the database server, the application server, or the batch server. When it detects Process Requests in the Process Request Table it submits requests to run as background processes in the appropriate location and at the time specified.

The Process Scheduler Server Agent needs to be started before you can successfully submit requests to the Process Scheduler. The server agent can be started and stopped manually by a server administrator, or it can be started on Windows NT as an NT Service, which starts processes automatically when a server is booted.

While the server agent is up it is not always running. To conserve system resources, the Process Scheduler Server Agent goes into sleep mode for a specified interval of time, and then periodically emerges from sleep mode to poll for incoming Process Requests. The sleep interval is a parameter that can be set in Process Scheduler Manager.



For more information, see Process Scheduler Administration

Process Scheduler Distribution Agent

The Process Scheduler Distribution Agent (Distribution Agent) is responsible for transferring all files generated from a process request to the Report Repository. (The Report Repository is a where process output resides until it is accessed by Report Manager.) Reports or log files can be viewed from either Report Manager or Process Monitor when they are in the Report Repository. Files transferred to the Report Repository can include reports, logs, and trace files. Access to these files is controlled through PeopleSoft's security system.

The Distribution Agent is a process that runs on the same server as the Process Scheduler Server Agent (Server Agent) started either by the Server Agent or by Tuxedo (based on how Process Scheduler is configured through PSADMIN).

The Server Agent and the Distribution Agent both check the status of each process in the Report List table. When the Server Agent initiates a process request that has an output destination type of Web, or if the Server Definition page is set up to transfer log/trace files to Report Manager, then an entry is inserted into the Report List table. Once the program associated with the process finishes, the status in the Report List table is updated to indicate that the generated files are ready to transfer to Report Manager. The Distribution Agent polls the Report List table to determine which process requests have finished running and then transfers them to Report Manager.

Submitting a Process Request


This section introduces you to the pages, menus, and dialog boxes associated with Process Scheduler Manager, where you can find them, and what purpose they serve.

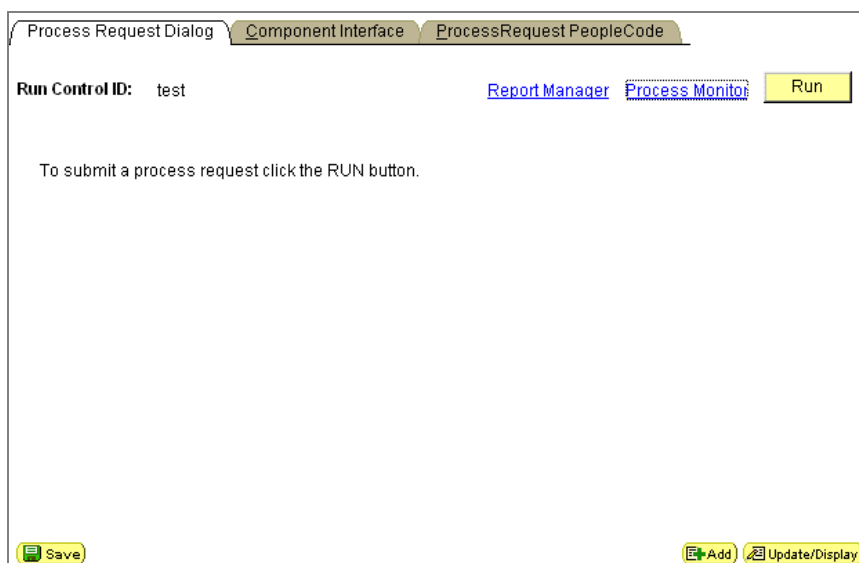
Detailed information, such as page controls and options, for each window or menu appears as it is discussed within the structure of this book.

Using the Process Request Dialog page

You submit a process request from the Process Request Dialog page in your browser by selecting **Run** from your application page or by selecting **PeopleTools, Process Scheduler Manager**. From this page, you also can select links to look at your completed reports in Report Manager, and the status of a job in Process Monitor.



Note. If you are submitting a process using the Windows client, the Process Request Dialog page appears after you select **File, Run** or click the  toolbar button from a PeopleSoft application. The instructions in this chapter are directed at running processes from a browser using PeopleSoft Internet Architecture (PIA). When you are submitting a process request from PIA, you submit a request using the Process Scheduler Server Agent. If you are processing from Windows, you still have the option of submitting your request through the Server Agent or running it locally on your workstation.



Process Request Dialog

Component Interface ProcessRequest PeopleCode

Run Control ID: test [Report Manager](#) [Process Monitor](#) [Run](#)

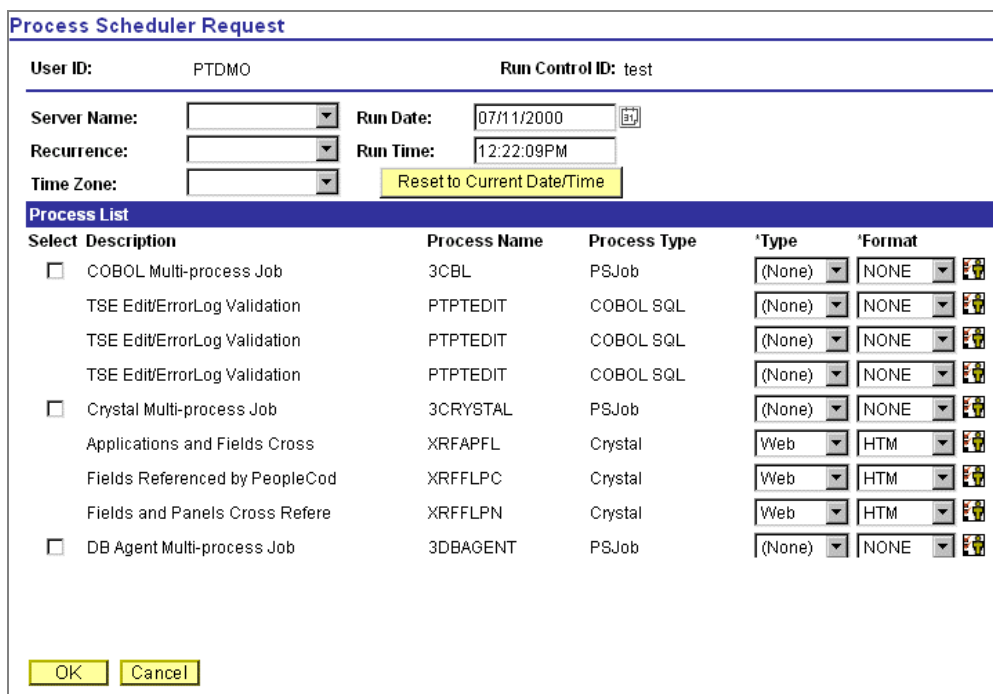
To submit a process request click the RUN button.

[Save](#) [Add](#) [Update/Display](#)

Process Request Dialog page

Selecting a Process

The Process Scheduler Request page enables you to select a job or process to run. This component is commonly integrated into applications to support process requests made from PeopleSoft application by selecting **Run**. The Process Request page enables you to specify such variables as where a process runs and in what format the process output is generated.



Process Scheduler Request

User ID: PTDMO Run Control ID: test

Server Name: Run Date: 07/11/2000

Recurrence: Run Time: 12:22:09PM

Time Zone: [Reset to Current Date/Time](#)

Select	Description	Process Name	Process Type	Type	Format
<input type="checkbox"/>	COBOL Multi-process Job	3CBL	PSJob	(None)	NONE
	TSE Edit/ErrorLog Validation	PTPTEDIT	COBOL SQL	(None)	NONE
	TSE Edit/ErrorLog Validation	PTPTEDIT	COBOL SQL	(None)	NONE
	TSE Edit/ErrorLog Validation	PTPTEDIT	COBOL SQL	(None)	NONE
<input type="checkbox"/>	Crystal Multi-process Job	3CRYSTAL	PSJob	(None)	NONE
	Applications and Fields Cross	XRFPFL	Crystal	Web	HTM
	Fields Referenced by PeopleCod	XRFFLPC	Crystal	Web	HTM
	Fields and Panels Cross Refere	XRFFLPN	Crystal	Web	HTM
<input type="checkbox"/>	DB Agent Multi-process Job	3DBAGENT	PSJob	(None)	NONE

[OK](#) [Cancel](#)

Process Scheduler Request page

After you select the checkboxes for the processes you want to run, click **OK** to submit the request. Now, you can use Process Monitor to track the status of your request.

Checking Your Jobs With Process Monitor

Process Monitor allows you to monitor the status of process requests that you've submitted by displaying a list of the currently logged requests and the request's status. Depending on your security authorization, you can get more detailed information on the process requests and actually update requests manually, if needed.

For instance, if you need to double-check something (like a Job Definition) you can cancel or put on hold any requests that are waiting to be started; then, after double-checking you can re-queue the requests you've put on hold. When a process is completed, Process Monitor reveals its completed status so you know that you can retrieve the output results.



For more information about checking the status of your job, see Process Scheduler for the End User and Process Scheduler Administration.

Using Process Monitor, if a process encounters an error or a server is down, you can find out almost immediately and work to solve the problem, rather than just passively waiting for the process results. You can also see what processes are queued to run in the future.

To view the list of your processes, select PeopleTools, Process Monitor, Inquire, Process Requests.

Process List

Server List

View Process Request For

User: PTDMO

Type:

Last:

Days:

Refresh

Server:

Run Status:

Instance:

☐ View Job Items

Instance Seq.	Process Type	Process Name	User	Run Date/Time	Run Status	Details
39	PSJob	3CRYSTAL	PTDMO	05/23/2000 12:13:58PM PDT	Queued	Details
35	PSJob	3CBL	PTDMO	05/23/2000 12:13:58PM PDT	Queued	Details

Save

Previous tab

Next tab

[Process List](#) | [Server List](#)

Process List page



If you have not submitted any process requests, the list box is empty.

Run Status is probably what concerns you while you monitor your process requests. However, from this window you can also do the following tasks:

- Refresh the Process Monitor so that it reflects all the current process requests being processed.
- Select filtering options so that you only view the process requests that meet given criteria such as choosing run status, process type, and so on.
- View server status to make sure a Process Server Agent associated with a process request is running.
- Review details associated with particular process requests.
- View the individual items, or process requests, that make up a PSJob.

All of these topics are discussed in more detail later in this book.



For more information, refer to Process Scheduler for the End User.

Process Request Run Status

The Run Status column on the Process List page indicates the current state of your process. Knowing the status of your job helps you to see where it is in the queue or identify a problem if the process has an error.

Run Status	Description	Updated by
Queued	Status assigned to a new process request. The process request will remain Queued until a Process Scheduler Server has picked up the new request.	Process Request Dialog or ProcessRequest() PeopleCode function.
Initiated	Indicates a Process Scheduler Server has acknowledged the new request. At this time, Process Scheduler validates all the parameters associated with this request and submits the command line to start the process	Process Scheduler
Processing	This indicates that Process Scheduler has successfully initiated the program. A status Processing indicates the program is running.	Batch Program

Successful	The program has successfully completed.	Batch Program
Error	The program 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 prior to terminating.	Batch Program
Not Successful	Indicates that the program encountered an error within the transaction. Not Successful is different from Error because the process is marked as restartable. Application Engine is the only delivered process type that is restartable.	Batch Program
Posting	Programs that generate reports (such as SQR, nVision and Crystal) will have this run status when the report has been generated and is waiting for the Distribution Agent to post the report to Report Manager. After the Distribution Agent has transferred the reports to Report Manager, the Distribution Agent update the Run Status to Successful .	Batch Program
Not Posted	Indicates that the Distribution Agent wasn't able to transfer the reports to Report Manager.	Distribution Agent
Cancel	A user has requested to cancel scheduling of a process request.	Process Monitor
Cancelled	This status indicates that the server agent has successfully cancelled the request after it has started.	Process Scheduler Server Agent

Viewing Output in Report Manager

Report Manager is like your own personal in box of reports and process output. It provides a secure way to view report content, check the posting status of your output, and see content detail messages.

Using Report Manager, you can see all of your reports by simply opening your Report List in your browser. You can also link to Application Engine and COBOL log and trace files by selecting the **Detail** link on the page.

Report List Archived Reports

View Reports For

User: PTDMO Process Type: [dropdown]
 Status: [dropdown] Last: 1 Days Refresh

Report List View All First 1-2 of 2 Last

Select	Report ID	Prcs Instance	Report Description	Request Date/Time	Format	Status	Details
<input type="checkbox"/>	2	9	Applications and Fields Cross	07/11/2000 1:03:03PM	Acrobat (*.pdf)	Scheduled	Details
<input type="checkbox"/>	1	8	Applications and Fields Cross	07/11/2000 1:03:02PM	HTML Documents (*.htm)	Processing	Details

Delete Click the delete button to delete the selected report(s)

Save Previous tab Next tab

[Report List](#) | [Archived Reports](#)

Report List page

Process Scheduler Manager Terminology

Before you continue reading the appropriate chapters that relate to your role within your PeopleSoft implementation, we recommend that you take a moment to review some of the common terms you encounter throughout this book.

The following list includes the fundamental terminology to help you understand Process Manager Scheduler to while you read this book.



Tip. You might want to print the following list for easy access while reading until you become more familiar with the terminology.

Generic Process Type

Process types are identified by a generic process type. For example, the generic process type SQR includes all SQR process types, such as SQR Process, SQR Report, and so on.

Process Definition

Process definitions are created in the Process Scheduler pages to define each specific run request. A Process Definition is comprised of a variety of variables including pages associated with a request, security groups, output parameters, page transfers, and notification options.

Process Group	Used to associate specific process definitions with an operator class for restricting the operator's ability to initiate certain requests.
Process Instance	A unique number that identifies each process request. This value is automatically incremented and assigned to each requested process when the process is submitted to run.
Process Job	Multiple process definitions can be logically linked into a job request to process each request serially or in parallel, and optionally to initiate subsequent processes based on the return code from each prior request.
Process Request	A single run request, such as an SQR, a COBOL program, or a Crystal report.
Process Run Control	A PeopleTools variable used to retain Process Scheduler-defined values needed at runtime for all requests that reference the run control ID. This is not to be confused with application run controls, which might be defined with the same run control ID, but only contain information specific to a given application process request.
Process Scheduler Distribution Agent	The server-based program (PSDSTSRV) responsible for transferring generated files to Report Manager
Process Scheduler Server Agent	The server-based program (PSPRCSSRV) that manages the selection, validation, and initiation of all queued requests for each defined server platform. The server agent can also cancel processes if requested through Process Monitor.
Process Type	A global definition under which related process definitions are grouped. This allows for easy maintenance of process definitions that share common parameters. You define Process Types for specific platforms, or database/operating system combinations.
Report Repository	A directory setup in the Web Server during the PeopleSoft Internet Architecture (PIA) to contain reports and log files generated from process requests. Content of the Report Repository can be viewed either through the Report Manager or Process Monitor Detail.
Run Control ID	A unique ID to associate each operator with its own run control table entries.

CHAPTER 2

Process Scheduler for the End User

This section is intended for the PeopleSoft application end user who uses Process Scheduler from a Web browser to run a background process, such as Application Engine, COBOL, or SQR. Depending on your security authorizations, you can run background processes on your browser or on a network server. If you have custom applications that still use the Windows client, or if you are using an NT development environment, you still have the same basic functionality as though you were setting up processes in the browser.

After reading this section, you will be familiar with the following concepts:

- Submitting process requests.
- Checking the status of your process using Process Monitor.
- Viewing your output using Report Manager.


It's important to keep in mind that before Process Scheduler can run any process, the underlying batch applications—Application Engine, SQR, COBOL, or Crystal Reports—must be properly configured for your environment. If these components have not been properly set up at your site on a file server or on your local workstation to work as intended by the vendor, they won't work when requested by Process Scheduler. The technical staff at your site should make sure all configurations are complete and tested prior to general use.

This section only discusses the tasks with which an end user needs to be familiar. All configuration details, including workstation configuration, are discussed in the Administration section. The following topics introduce the two main components that an end user faces when using Process Scheduler and some practice procedures that you can follow to run a process through Process Scheduler.

Submitting a Process Request

You submit a process request from the Process Request Dialog page or by selecting Run from within your PeopleSoft application. This page shows you the options that you have selected for a particular process request. From this page, you can select links to look at Report Manager, Process Monitor, or the Process Scheduler Request page.



Note. If you are submitting a process using the Windows client, the Process Request Dialog page appears after you select **File, Run** or click the  toolbar button from a PeopleSoft application. The instructions in this chapter are written for users who run processes from a browser using PeopleSoft Internet Architecture (PIA).

The Process Request Dialog page has two tabs that show you the options you can choose for submitting requests, if you do not choose to run your process from the browser:

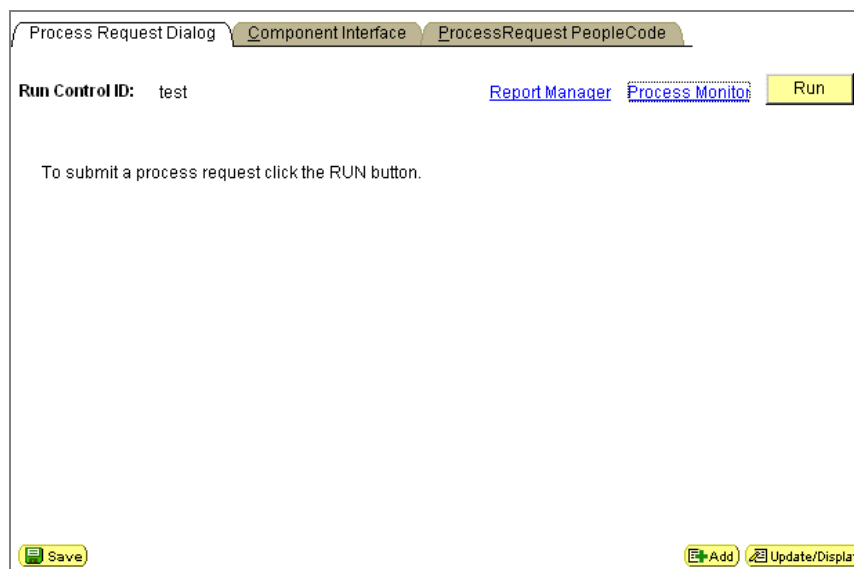
- The Component Interface Process Request page enables you to run the process from a component.
- The PeopleCode CreateProcessRequest enables you to run the process using PeopleCode.



This chapter is written for users whose primary focus is sending process requests from the browser. For more information about creating a process request, see **PeopleCode CreateProcess Requests**, see PeopleCode ProcessRequest. For more information about **Component Interface Process Requests**, see Scheduling Processes From Outside PeopleSoft.

Process Request Dialog

The Process Request Dialog tab shows the run control ID for a specific job. There are also links to Report Manager and Process Monitor, so that you can check the progress of your job and view its content immediately after it is posted. To display the Process Request Dialog page, select PeopleTools, Process Scheduler Manager, Process, Sample Processes.



Process Request Dialog page

The Process Request Dialog page has two tabs that show you the options you can choose for submitting requests, if you do not choose to run your process from the browser:

- The Component Interface Process Request page enables you to run the process from a

component.

- The PeopleCode CreateProcessRequest enables you to run the process using PeopleCode.



This chapter is written for users whose primary focus is sending process requests from the browser. For more information about creating a process request, see **PeopleCode CreateProcess Requests**, see PeopleCode ProcessRequest. For more information about **Component Interface Process Requests**, see Scheduling Processes From Outside PeopleSoft.

Scheduling a Process Request

In this section you learn how to submit process requests from your browser and how to use Process Monitor to check server status. In most cases, you should have a few predefined run control IDs from which to choose and you simply run the process from the Process Request Dialog page. Occasionally, you might need to add a run control ID.

A run control ID is an identifier that, when paired with your user ID, uniquely identifies the process you are running. In addition, it enables important parameters to be available for a process when it runs. This ensures that when a process runs in the background, it does not have to prompt you for any additional values. All parameters are stored within the system and associated with run control IDs and user IDs. To add a run control ID, click the add link from the search dialog page, and type in the new run control ID.

The Process Scheduler Request page allows you to submit a job or process to run. This component is commonly integrated into applications to support process requests made from PeopleSoft application by selecting Run. The Process Request page enables you to specify such variables as where a process runs and in what format the process output will be generated.

To send a process request from your browser:

1. Select PeopleTools, Process Scheduler Manager, Process, Sample Processes.
2. In the Search page, enter the run control ID you want to apply to the process or use the add link to create an additional run control ID.

The Process Request Dialog page appears.

3. Click Run.

The Process Scheduler Request page appears showing all of the processes that you have the security to run. This page enables you to set the server, run date and time, how often the process runs (the recurrence of the process), output type, format, and distribution of your processes.

4. Set the page controls for your process and click OK.

Process Scheduler Request

User ID: PTDMO Run Control ID: test

Server Name: Run Date: 07/11/2000

Recurrence: Run Time: 12:22:09PM

Time Zone:

Select	Description	Process Name	Process Type	Type	Format
<input type="checkbox"/>	COBOL Multi-process Job	3CBL	PSJob	(None)	NONE
	TSE Edit/ErrorLog Validation	PTPTEDIT	COBOL SQL	(None)	NONE
	TSE Edit/ErrorLog Validation	PTPTEDIT	COBOL SQL	(None)	NONE
	TSE Edit/ErrorLog Validation	PTPTEDIT	COBOL SQL	(None)	NONE
<input type="checkbox"/>	Crystal Multi-process Job	3CRYSTAL	PSJob	(None)	NONE
	Applications and Fields Cross	XRFAPFL	Crystal	Web	HTM
	Fields Referenced by PeopleCod	XRFFLPC	Crystal	Web	HTM
	Fields and Panels Cross Refere	XRFFLPN	Crystal	Web	HTM
<input type="checkbox"/>	DB Agent Multi-process Job	3DBAGENT	PSJob	(None)	NONE

Process Scheduler Request page

Server Name

The name of the server on which you want the process to run. The default for the server name is *Any*.

Recurrence

The recurring time intervals for a process request to run. For instance, if you need to run a process every weekday at 5 P.M. that resolves all the transactions managed by your website, you could select the run recurrence definition of *M-F at 5pm* to schedule this process to run at the appropriate times. *None* is the default.

Time Zone

The time zone in which your process will run. For instance, you could be in Eastern Standard Time (EST) and schedule a process to run in PST (Pacific Standard Time).

Run Date

The date on which you want the process to run.

Run Time

The time at which you want the process to run.

Reset to Current Date/Time

Sets the **Run Date** and **Run Time** to the present date and time.

Select Description

This helps to uniquely identify a process. You should be familiar enough with the processes that you run as part of your daily tasks to identify them by this description.

Process Name

The name of the process as it appears in the definition.

Process Type

The type of process, such as COBOL, or Crystal.

Type

The destination type for this job.

File. This enables you to write the output to a file that appears in the Output Destination.

Printer. This value resolves to the default printer defined for a workstation or a server. You can enter a custom printer location if you have the appropriate security access.

Email. If you want a report to be sent to a particular email list, you can enter the appropriate email address in the Output Destination edit box. This option is available for SQR, nVision, and Crystal.

Web. Sends all output of the process to the report repository, including log and trace files. The format of the report is specified by the format list.

Format

Just as you have a few options for Destination Type, there are even more options regarding your Output Format. There are a variety of possible output types depending on what Process Type you have selected. The default output format for Crystal, SQR, and nVision is HTML.

Distribution Icon

This displays the Distribution Detail page that allows you to enter additional distribution information when the output destination type you select is **Web** or **Email**.

For more information, see Setting Report Distribution.

Selecting Output Types

There are several kinds of file output types that you can choose for your process. The following table shows a list of file output types listed by process type. The default output type for Crystal and nVision processes is HTML. The default output type for SQR is Adobe Acrobat (.pdf). COBOL and Application Engine processes defaults create output in the log file.

File type	Crystal	SQR	nVision
Excel (*.xls)	X		X
Word (*.doc)	X		
Acrobat (*.pdf) (Must have Acrobat Reader installed to read these files.)		X	
HP Format (*.lis)		X	
Line Printer (*.lis)	X	X	

File type	Crystal	SQR	nVision
Rich Text Files (*.rtf)	X		
SQR Portable Format (*.spf)		X	
Text Files (*.txt)	X		
PostScript Files (*.ps)		X	
Crystal Reports (*.rpt)	X		
Comma Delimited (*.csv)		X	
HTML (*.htm)	X	X	X



Note. You must have Adobe Acrobat Reader installed on your workstation to be able to read Acrobat (.pdf) files.


Setting Report Distribution

The Distribution Detail page enables you to choose the recipients of your process output. This page is accessed by clicking the Distribution icon that appears only when the output type is either Web or email. If the process that you are running allows output that can be emailed (for example, Crystal can create Adobe Acrobat (.pdf) files), you can enter an email subject and message and send the output to a group of email addresses.



Note. If you are entering a list of email addresses, make sure to use a semicolon (;) to separate each address from the others.

You can add users or roles to the distribution by adding a row and filling in the pertinent information. You can also use this page to add someone who would not normally have the proper security to view this output.

Select the  Distribution icon to display the Distribution Detail page.

Distribution Detail page



To distribute reports to a role ID or a user ID using email, all recipients must have their email address entered in their Manage Security User Profile.

Distribute To	List of user or role IDs that are the recipients of the email and are authorized to view the content of the email.
Email Subject	This is the text that appears in the subject line of the email. If no text is entered in this field, the default text message is used. <i>Output from <Program Name>(<Process Instance>).</i>
Message Text	This is the text that appears in the body of the email. If no text is entered in this field, the default text message is used. <i>Message from Process Scheduler running on system <Process Scheduler Server Agent> using database <Database Name>.</i>
Email With Log	(For SQR only.) If the check box is marked, log files resulting from the SQR program will be included as an attachment to the email file.



For more information about Manage Security and User Profiles, see Email ID.

Using Process Monitor

After you have submitted your job using the Process Scheduler Request page, you use Process Monitor to review the status of scheduled or running processes. You can view all processes to see the status of any job in the queue, and control any processes you've initiated.

Here are some of the tasks you can complete with Process Monitor:

- Check the status of your submitted process requests.
- Cancel process requests that have been initiated or are currently processing.
- Hold process requests that are queued and queue process requests you've put on hold.
- Delete completed process requests from the queue.
- Transfer from a completed process request to a pre-designated panel.

Viewing the Status of Your Process

You display the Process List page by selecting PeopleTools, Process Monitor, Inquire, Process Requests.

Process Monitor is comprised of two pages: the Process List page and the Server List page. The Process List page lets you to monitor the process requests you've submitted, and the Server List page lets you to monitor the Process Scheduler Server Agents within your system.

To check the current status of a process, refresh the list by clicking Refresh.

Process List **Server List**

View Process Request For

User: Type: Last:

Server: Run Status: Instance: to

☐ View Job Items

Instance Seq.	Process Type	Process Name	User	Run Date/Time	Run Status	Details
4	SQR Report	XRFWIN2	PTDMO	11/02/2000 1:39:37PM PST	Queued	Details

Process List page

User	This allows you to view the processes submitted by a particular user ID, as in <i>PTDMO</i> or <i>HRDMO</i> . Usually, you view by your own user ID. Leaving this field blank lets you view all the processes that you are authorized to view.
Type	Allows you to view by a particular Process Type, as in just Application Engine, Crystal, COBOL, SQR, or Application Engine processes.
Last	Here you can specify an interval of time by which to limit the process requests that appear in the list. You enter a custom numerical value in the edit box preceding the drop down list, and you can select a unit type from the drop-down list: <i>Days, Hours, or Minutes.</i>
Server	You can just view processes run on a particular server, such as <i>PSNT.</i>
Run Status	Select this option if you only want to view by a specific status, such as <i>Completed</i> or <i>Error.</i>
View Job Items	This lets you view the individual items, or process requests, that make up a PSJob. You can select a particular item, if needed, as opposed to only being able to monitor the Job as a whole. If you just want to see the PSJob and entry and not the process requests within it, just clear the View Job Items checkbox. This helps to reduce clutter in the Process List.
Instance	The process instance or order in the queue that the process falls. This number is automatically generated.
Sequence	Within a PSJob, each individual process request has a defined sequence in which it executes in relation to the others. This column reveals the execution sequence, as in 1, 2, 3, and so on.
Process Type	Shows the type of process, such as <i>Application Engine, COBOL, or SQL.</i>
Process Name	The actual name of the process.
User	Shows the user ID that is submitting the request, such as <i>PTDMO, PS, or VPI.</i>
Run Date/Time	The time and date that the process request was created.
Run Status	Indicates the status of the process, such as <i>Queued, Initiated, or Cancelled.</i>
Details	Displays the Process Details page.

In a typical environment, you could see multiple entries appearing in the Process List. Of course the number of entries you see always depends on the filtering criteria you select in the **View Process Request For** group box.

Viewing Process Details

You can get details about a particular process request by clicking the **Details** link in the **Details** column. This opens the **Process Detail** page, where you can view such details as request parameters and message logs.

Process Detail	
Process	
Instance: 959	Type: Application Engine
Name: AP_APY2015	Description: Pay Cycle Process Request
Run	Update Process
Run Control ID: DAILY	<input type="radio"/> Hold Request
Location: Server	<input type="radio"/> Queue Request
Server: PSNT	<input type="radio"/> Cancel Request
Recurrence:	<input checked="" type="radio"/> Delete Request
	<input type="radio"/> Restart Request
Date/Time	Actions
Request Created On: 08/07/2000 3:30:03PM PDT	Parameters Transfer
Run Anytime After: 08/07/2000 3:30:04PM PDT	Message Log Temp Tables
Began Process At: 08/07/2000 3:30:28PM PDT	Batch Timings
Ended Process At: 08/07/2000 3:31:18PM PDT	View Log/Trace
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

Process Detail page

The following topics describe the controls within each group. Many of the items are display-only. However, you can use some controls to manipulate the program run.

Process

The **Process** group box contains general information to help you identify the process request. This is a display-only group that shows basic descriptive information about this process.

Run

The **Run** group box shows specific run information, such as the run control ID and the run location. If the process runs on the server, the server name appears in the **Server** field and any run recurrence that you select appears in the **Recurrence** field.

Update Process

The actions you can take under **Update Process** depend on your user authorizations and the current status of the request. The **Update Process** section is available only if your user ID is

authorized to update the selected request. Otherwise, this section is disabled, and you can't alter the current status.

If you are authorized, you have the following options for the process request selected.

- Hold Request
- Queue Request
- Cancel Request
- Delete Request
- Restart Request

Of course, which option you select depends on the current run status of the process request. For instance, you can't cancel a job that has already completed; and you can't hold a request that is currently processing. The valid actions based on the current status of each process request appear in the following table.

<i>Current Status</i>	<i>Valid Action(s)</i>
Hold	Queue, Cancel
Queued	Hold, Cancel
Initiated	Cancel
Processing	Cancel
Error	Delete
Cancelled	Delete
Successful	Delete
Unsuccessful	Delete
Not Posted	Resend, Delete



Note. You must click **OK** to confirm your **Update Process** radio button request on the **Process Detail** page.

Date/Time

The **Date/Time** group box shows when the request was submitted and selected to run. It also shows the actual process **Begin** and **End** times. If the request fails at initiation, the **Begin** and **End** times don't appear. These statistics are for display only.

- **Request Created On.** This specifies at what time the request appeared in the Process Request table (PSPRCRQST).



Note. **Request Created On** is the same as **Start Request** on the Recurrence Definition page.

- **Run Anytime After.** This specifies the time at which the user selected File, Run in a PeopleSoft application.
- **Began Process At.** Shows the actual date and time that this request was selected and initiated. For server-based requests, there could be a large gap between the **Request Created On** and **Began Process At** values, due to Process Scheduler Server Agent sleeptime and other server processing activity.
- **Ended Process At.** Specifies at what time a process request status gets updated to *Success*.

Actions

The Actions group box contains links to other pages that give you additional details about your process parameters. The following topics describe the actions you can perform on submitted process requests.

Process Request Parameters

The **Process Request Parameters** page provides additional information about the process parameters. At the top of the page, there's a **Process** section, just like in the **Process Detail** page. It provides the same general information about the process so you can easily identify it.

The **Parameters** section provides details about **Parm List** (Parameter List), **Working Dir** (Directory), and **Message Text** that were specified for the request. All non-secure, runtime definition variables are shown expanded for both client and server requests. Having this information should help eliminate configuration problems by identifying any incorrect entries either in the PeopleSoft Configuration Manager, PSADMIN, or your operating environment.

Parm List	Displays the path and program used to execute the process.
Working Dir	Usually presents the directory in which the database connectivity software is installed.
Destination	<p>This reveals the location where you can find the completed output generated by the process, such as %%OutputDirectory%%.</p> <p>When the output destination for the process is Web, the destination lists the user IDs or role IDs that are authorized to view the report in Report Manager.</p>
Message Text	Additional information about the process status is shown in here. Typically, this displays messages that are built into the program you are running that describe its status.

Process Request Parameters	
Process	
Instance: 77	Type: Application Engine
Name: GVT_MASSORG	Description: Mass Organization Change
Parameters	
Parm List:	
Y:\BIN\SERVER\WINX86\psae.exe -CT MICROSOFT -CD H800R7JB -CO PS -CP %OPRPSWD% -R FRANCOIS_KICKS_MOC_IN_THE_B-I 77 -AI GVT_MASSORG	
Working Dir:	
c:\apps\ldb\mssql7\bin	
Destination:	
Return	

Process Request Parameters page

You can select the **Parm List** (the command line) and copy it into other tools, if needed. This is very useful when trying to isolate a request-related problem originating outside of Process Scheduler, such as an incorrect entry in Configuration Manager or an SQR compile problem.

For example, after copying the command line, you could paste the parameters directly into the target of an SQRW icon, and then you could try to run the process outside of Process Scheduler to isolate a problem.



Note. You must manually provide any passwords (CP %OPPPSWD% params) required in the request parameters, because they are not exposed on the **Process Request Parameters** page for security reasons.

Message Log

Click the **Message Log** link to view any messages that the program you invoked might have inserted into the Message Log.



Note. This option is available for Application Engine and COBOL processes only.

Message Log			
Process			
Instance:	77	Type:	Application Engine
Name:	GVT_MASSORG	Description:	Mass Organization Change
View All First ◀ 1-2 of 2 ▶ Last			
Severity	Message Log Time	Message	Explain
10	2:33:35PM	Mass Org Change to New Position FPNMOC09	Explain
	2:34:01PM	Successfully posted generated files to the report repository	Explain
Return			

Message Log page



Note. This option is applicable to Application Engine and COBOL processes only.

Click **Explain** to see another page with a more detailed explanation of the message.

Explain
Message: Successfully posted generated files to the report repository
Description: All files generated by this process was successfully posted to the report repository.
Return

Explain page

Batch Timings

The Batch Timings report is a set of statistics that system administrators want to study as they tune the system to gain better performance. This report relates specifically to Application Engine program performance.



For more information about the Batch Timings report and Application Engine, see Defining System Settings.

Transfer

Once a process completes and it has an associated page defined as a transfer page, you can click this link to go directly to the page. Usually, you use this feature to check the data updated by the background process.

This option has been left in Process Monitor for backward compatibility with PeopleSoft 7.5. The **Message Log** has replaced this option for use with more current releases of PeopleSoft.

Temp Tables

Temp Tables (Temporary tables), can be very important assets for many of your Application Engine programs. Typically, temporary tables store transient or intermediate results during a program run. You also use Temporary Tables to improve performance.



For more information about using Temporary Tables for Application Engine programs, see Temp Tables.

View Log/Trace


When you click the **View Log/Trace** link, a new browser window launches with links that enables you to view the message log and trace file in your browser. The View Log/Trace link appears in the Process Monitor Detail page when at least one of the following conditions are met:


- The output destination for the process request is Web and the report and log files were successfully posted to the Report Repository by the Distribution Agent. The process must have a run status of **Successful**.

If the report hasn't been transferred to the Report Repository, the run status of the process request will remain as **Posting** and the View/Log link will not be visible. In the status of the request remains Posting, check the Message Log for any messages from the Distribution Agent indicating that there were problems transferring files to the Report Repository.

- The process request ran from a Process Scheduler Server Agent that was set up using the Server Definition page with a Distribution Node. You must also have selected to transfer log files to the Report Repository when you set up the preferences on this page.

The View Log/Trace option can only be viewed from the Web. This option is not available when accessing the Process Monitor Detail from Windows version of PeopleTools.



Report/Log Viewer


Instance:	217	Type:	SQR Report
Name:	PAY002	Run Ctrl ID:	cc
Status:	Success	Submitted By:	PS
Server:	PSNT	Recurrence:	

Payroll Register

Name	Size	Creation Date
Trace File	135 bytes	Thu Jul 20 15:02:31 2000
Message Log	995 bytes	Thu Jul 20 15:02:31 2000

Report/Log Viewer page

Canceling a Process at Runtime

Support for the runtime canceling of Initiated and Processing requests from the Process Monitor is fully supported for the following:

- Windows NT server
- UNIX



Note. For other operating systems (OS390), the request to cancel a running process sets the run status to *Cancel* in the Process Request table, but the task is not actually canceled.

Viewing the Status of Your Servers

The Server List page of Process Monitor shows you information on each of the Process Scheduler Server Agents that are defined in the system.



List of Servers available.					
Server	Description	Begin Date/Time	Last Update Date/Time	Status	Details
PSNT	NT Server Agent	07/10/2000 7:34:28PM	07/13/2000 5:54:00PM	Running	Details
PSUNIX	UNIX Server Agent		03/10/1994 9:40:37PM	Down	Details

Server List page

The interface is similar to the Process List. For more details on a particular entry, just click **Details**. To refresh the server list for the most current status of a server, click **Refresh**.

The Server List contains the following columns:

- **Server.** This is the actual system name that identifies the server, as in PSNT or PSUNIX.
- **Description.** This description helps you identify a particular server by its function or operating system. For example, you could have an HR Server Agent and a Financials Server Agent.
- **Begin Date/Time.** This value reflects the last time you started the Server Agent.
- **Last Update Date/Time.** This value reflects the last time you refreshed the Server List to help determine if you have the most current information.
- **Server Status.** This value lets you know if the server is running. There are three possibilities: *Running*, *Down*, or *Suspended*.

For more details on the server, click **Details**.

Server Detail	
Server	
Server Name:	PSNT NT Server Agent
Operating System:	NT Server Status: Running
Max API Aware Tasks:	5 Hostname: MLEE2021800
Intervals	Update Details
Days Before Purge: 1	<input type="radio"/> Stop Server
Sleep Time: 15 seconds	<input type="radio"/> Suspend Server
Heartbeat: 60 seconds	<input checked="" type="radio"/> Restart Server
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

Server Detail page

Server

Server Name	The name of the server this process runs on.
Operating System	The name of the operating system of the server.
Status	The run status of the job.
Max API Aware Tasks	The number of concurrent processes that can run on this Process Scheduler Server.
Hostname	The name of the server where the Process Scheduler Server Agent was booted.



For more information about API Aware processes, see Understanding Process Request API Support.

Intervals

Days Before Purge	This is the setting used to purge process requests in the Process Request table. Purging the requests is done when the Process Scheduler Server starts. Optionally, it can also be done using the PRCSPURG.SQR while the server is still running.
Sleep Time	The specified interval at which the Process Scheduler Server Agent wakes up and polls the Process Request Table.

Heartbeat

The Process Scheduler Server Agent uses this value to track server status. Each time the server issues a heartbeat message, it updates the last update date/time stamp field in this table with the current date and time. This prevents the database from accepting more than one Process Scheduler Server Agent with the same name.

Update Details**Stop Server**

Select this option to shut down a Process Scheduler Server that is running or exhibiting problematic behavior.

Suspend Server

Select this option to prevent a running a Process Scheduler Server from accepting any new process requests.

Restart Server

If a Process Scheduler Server has been suspended, you can restart it by selecting this option. If a server has been stopped, you must restart it using PSADMIN.



After selecting one of these options, you must click **OK** to execute the command.



For more information about the Process Scheduler Server settings, see [Setting Up Server Definitions](#).

Scheduling a Process From Windows

Although you can still create, schedule, and run processes from both the client and server using Windows, PeopleSoft recommends that you use the PeopleSoft Internet Architecture from your browser to manage your processes. The Windows version of Process Scheduler Manager exists for backwards compatibility. While the same basic functionality exists in Windows, PIA allows you more options for distribution and more flexibility in viewing your output in Report Manager.



Note. This section gives instructions for running a process request using Windows—not using the Web. If you are using PIA in your browser, read the section entitled [Submitting a Process Request](#).

The PTDMO database includes a set of sample panels designed for running sample requests. All the sample processes appear on the Process, Sample Processes menu.

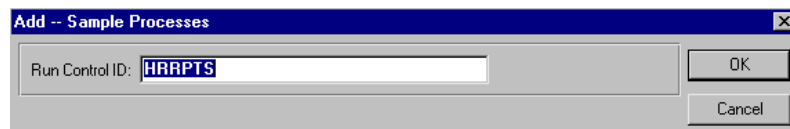
Follow the steps in this section to run the sample request through the Process Scheduler Request Panel.

To submit a process request :

5. Select Go, PeopleTools, Process Scheduler Manager.
6. Select Process, Sample Process, Process Request Dialog, Add.

The Add – Sample Process dialog box appears requesting a run control ID.

7. Enter a sample Run Control ID, such as HRRPTS, for the purpose of this example, and click OK.

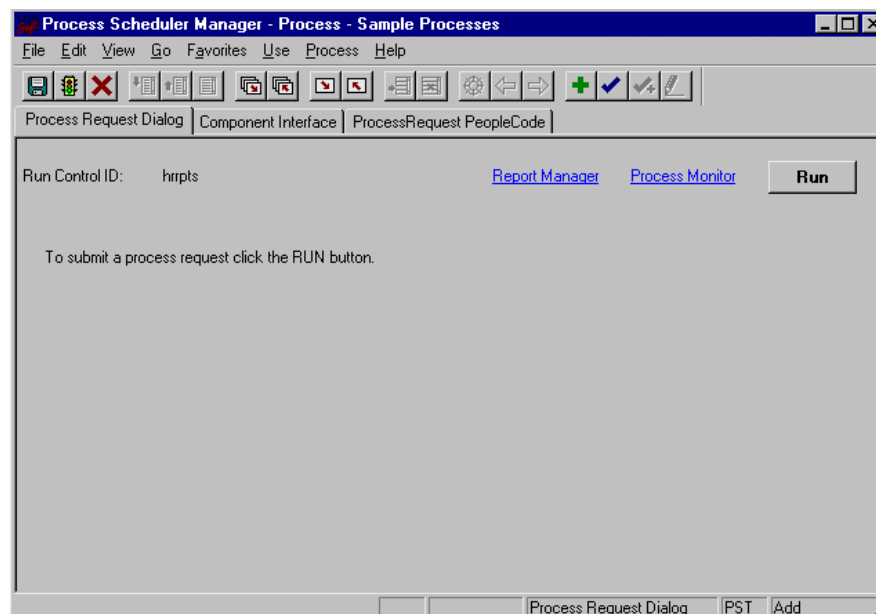


Add - Sample Processes dialog box





Note. Typically, end users do not need to add run control IDs. In most cases, you should have a few predefined run control IDs from which to choose. In short, a run control ID is an ID that, when paired with your user ID uniquely identifies the process you are running. In addition, it enables important parameters to be available for a process when it runs. This ensures that when a process runs in the background, it does not have to prompt an end user for any additional values. All parameters are stored within the system and associated with run control IDs and user IDs.


The Sample Processes page appears.



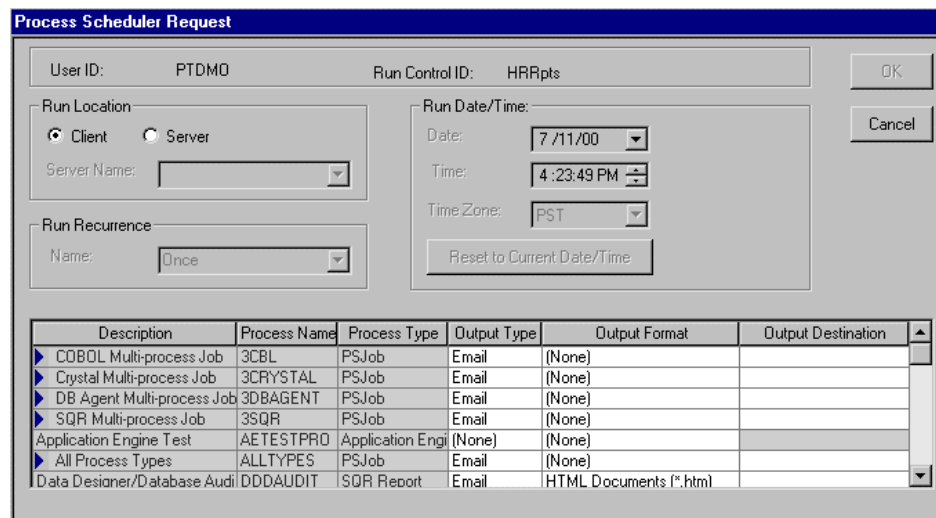
Process Scheduler Manager - Process - Sample Processes page



Warning! Always use the  button to run your processes on the client. The  button and the blue links for Report Manager or Process Scheduler are not supported in Windows.

8. Click  or select File, Run.

The Process Scheduler Request page appears.



Description	Process Name	Process Type	Output Type	Output Format	Output Destination
COBOL Multi-process Job	3CBL	PSJob	Email	(None)	
Crystal Multi-process Job	3CRYSTAL	PSJob	Email	(None)	
DB Agent Multi-process Job	3DBAGENT	PSJob	Email	(None)	
SQR Multi-process Job	3SQR	PSJob	Email	(None)	
Application Engine Test	AETESTPRO	Application Engi	(None)	(None)	
All Process Types	ALLTYPES	PSJob	Email	(None)	
Data Designer/Database Audit	DDDAUDIT	SQR Report	Email	HTML Documents (*.html)	

Process Scheduler Request page

Notice the current **User ID** signed on to PeopleTools (PTDMO) and the current **Run Control ID** (*HRRpts*) at the top of the panel. These are read-only and are based on your previous selections.

9. Select the **Run Location**.

The **Run Location** group box is where you specify where the process runs: **Client** or **Server**.

By selecting **Client**, you opt to run the process on your workstation. Depending on your security access, you may not be allowed to run background processes on your workstation. In such cases, the **Client** radio button is disabled.

If you select **Server**, you activate the **Server Name** drop-down list below the Server radio button. The **Server Name** drop-down list is disabled for client requests. Here you can select the server on which you want the process to run.

10. Select a process and select the output format and destination, if applicable.

If you are running the process on the client, your output types are **None**, **Default**, **File**, **Printer**, and **Window**.

If you are running the process on the server, your output types are **None**, **Default**, **Email**, **File**, **Printer**, and **Web**.



For more information about output types and destinations, see [Selecting Output Types](#).



Note. When you are running a process in Windows, your output types and output formats are limited. To take advantage of the new distribution functionality of PeopleSoft 8.0, use Process Scheduler from your browser.

11. Click OK.

Using Report Manager

Report Manager is like your own personal in box of reports. As a part of Process Scheduler, it provides a secured way to view report content and see content detail messages.

Using Report Manager, you can see all of the reports you are authorized to view by simply opening your Report List in your browser.

To view your reports in Report Manager, select PeopleTools, Report Manager, Inquire, Report List.

Report List
Archived Reports

View Reports For

User:
Process Type:
Status:
Last: Days

Select	Report ID	Prce Instance	Report Description	Request Date/Time	Format	Status	Details
<input type="checkbox"/>	162	939	Batch Journal Import	08/07/2000 11:42:50AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	161	938	Calculate Depreciation	08/07/2000 10:59:51AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	160	937	Calculate Depreciation	08/07/2000 10:58:56AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	159	936	Asset Transaction Loader	08/07/2000 10:56:24AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	158	935	Mass Change	08/07/2000 10:55:14AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	157	934	Calculate Depreciation	08/07/2000 10:49:46AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	156	933	General Ledger Activity Report	08/07/2000 9:29:55AM	Acrobat (*.pdf)	Posted	Details View


Click the delete button to delete the selected report(s)

[Report List](#) | [Archived Reports](#)

Report List page

Viewing Reports in Report Manager

Viewing a report is as simple as clicking the **View** link on the Report List page. When you do, the Report/Log viewer page is launched in a separate browser window, displaying the output file and any associated log or message file.


Report/Log Viewer

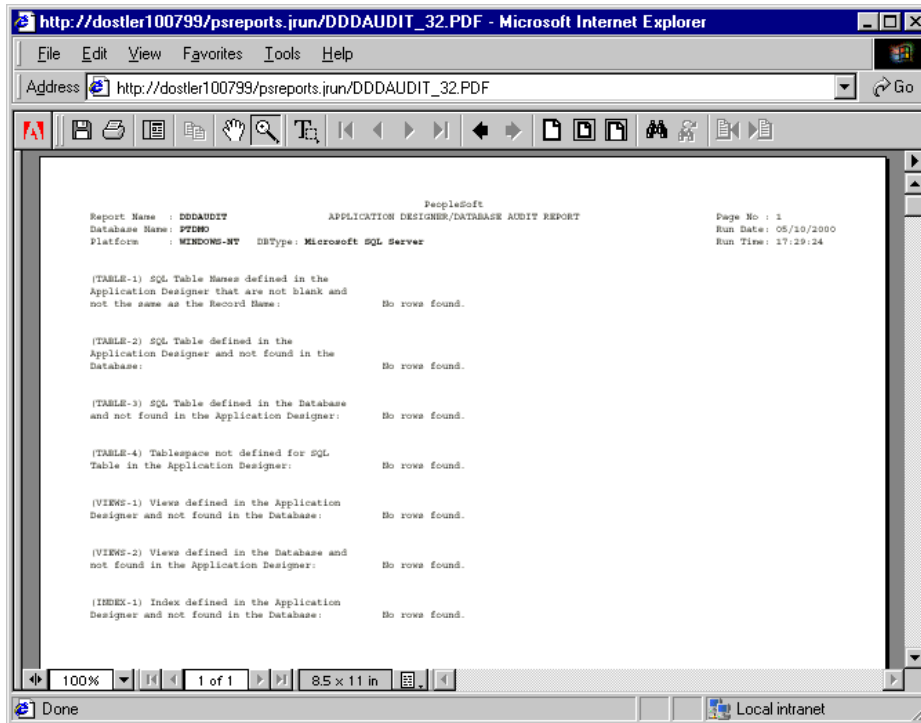
Instance:	32	Type:	SQR Report
Name:	DDDAUDIT	Run Cntl ID:	HRRpts
Status:	Success	Submitted By:	PTDMO
Server:	PSNT	Recurrence:	

Data Designer/Database Audit

Name	Size	Creation Date
DDDAUDIT_32.PDF	3843 bytes	Wed May 10 17:29:24 2000
Message Log	679 bytes	Wed May 10 17:29:02 2000

Report/Log Viewer page

Click either of the hyperlinks to display the report or the message log displayed in another browser window. In this example, the DDDAUDIT_32.PDF file is displayed in Acrobat (.pdf) format.



Adobe Acrobat output file of report DDDAUDIT_32

Understanding the Report List page

If you have a lot of reports listed, you can sort the list by selecting a user ID, a process type, a distribution status, or when the report was posted to the Report Manager. Select the desired settings from the drop-down lists at the top of the page and click **Refresh**.

Report List
Archived Reports

View Reports For

User:
Process Type:
Status:
Last: Days

Select	Report ID	Prs Instance	Report Description	Request Date/Time	Format	Status	Details
<input type="checkbox"/>	162	939	Batch Journal Import	08/07/2000 11:42:50AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	161	938	Calculate Depreciation	08/07/2000 10:59:51AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	160	937	Calculate Depreciation	08/07/2000 10:58:56AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	159	936	Asset Transaction Loader	08/07/2000 10:56:24AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	158	935	Mass Change	08/07/2000 10:55:14AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	157	934	Calculate Depreciation	08/07/2000 10:49:46AM	Acrobat (*.pdf)	Posted	Details View
<input type="checkbox"/>	156	933	General Ledger Activity Report	08/07/2000 9:29:55AM	Acrobat (*.pdf)	Posted	Details View

Click the delete button to delete the selected report(s)

[Report List](#) | [Archived Reports](#)

Report List page

There are several distribution statuses, and knowing what they mean will help you understand the progress of your job without having to check Process Monitor.

Distribution Status

A status of **Scheduled** indicates that the process was just added to the report request. If a report has the status of **Processing**, it indicates that Process Scheduler has initiated the program and is running the process at that moment. A **Generated** report is one that has finished processing and has all files available for transferring. A report that is **Posting** is in the process of being transferred to the Report Repository.

Deleting Reports from Report Manager

To delete a report from Report Manager, simply select the check box associated with the report and click **Delete**. Reports that have been deleted do not appear in the Archived Reports list.

Viewing Report Details

When you click **Details** for a process, you see a detailed description of the process, including the instance number, the report ID, descriptive information, and distribution identifiers. The Expiration Date is calculated from the Retention Date you set in the System Settings page.

Report Detail	
Report	
Report ID: 27	Process Instance: 28
Name: RPTBOOK	Process Type: nVision-ReportBook
Description	
Employee Salaries by Dept.	
Distribution Details	
Distribution Node: LAPODACA010400	Expiration Date: 07/15/2000
Distribute To	
Distribution ID Type	Distribution ID
User	PTDMO
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

Report Detail page

Archiving Reports

The Archived Reports page lists reports that have been purged from the Report List after they have passed their expiration date. You cannot retrieve a purged report from this list, but it gives you all of the information you need to retrieve a report from your backup or history copies of your reports.

Report List Archived Reports						
Process Type: <input type="text"/>						
Archive Date: <input type="text"/> <input type="button" value="Search"/> or Last: <input type="text"/> <input type="button" value="Days"/> <input type="button" value="Refresh"/>						
Archived Report List						
View All First 1-8 of 8 Last						
Report Output Details						
Archive Date	Report ID	Prce Instance	Report Description	Request Date/Time	Output Format	Process Type
07/23/2000	8	34	Employee Salaries by Dept.	07/20/2000 3:04:21PM	HTML Documents (*.htm)	nVision-Report
07/23/2000	7	33	DR_33_BYGRADE.HTM	07/20/2000 1:59:13PM	HTML Documents (*.htm)	nVision-Report
07/23/2000	6	32	DR_32_BYGRADE.HTM	07/20/2000 1:58:44PM	HTML Documents (*.htm)	nVision-Report
07/23/2000	5	31	Salaries by Grade	07/20/2000 1:58:00PM	HTML Documents (*.htm)	nVision-Report
07/23/2000	4	30	Salaries by Grade	07/20/2000 1:48:04PM	HTML Documents (*.htm)	nVision-Report
07/23/2000	3	29	Salaries by Grade	07/20/2000 1:30:53PM	Microsoft Excel Files (*.xls)	nVision-Report
07/23/2000	2	28	Employee Salaries by Dept.	07/20/2000 11:47:01AM	HTML Documents (*.htm)	nVision-Report
07/23/2000	1	27	Salaries by Grade	07/20/2000 11:19:44AM	HTML Documents (*.htm)	nVision-Report
<input type="button" value="Save"/> <input type="button" value="Previous tab"/> <input type="button" value="Next tab"/>						
Report List Archived Reports						

Archived Reports – Report page

CHAPTER 3

Process Scheduler Development

Before you can schedule any processes to run, you must first define the basic information Process Scheduler uses. Process Scheduler is delivered with a complete set of process type definitions, process definitions, and server definitions for all processes delivered with each PeopleSoft application. You may need to configure some of the definitions to suit your specific needs, but otherwise they are set up to run immediately.



We recommend mapping out the types of processes you plan to schedule, then gather the parameter information each process needs to run before you begin.

Process Scheduler uses the concept of *process types* and *process definitions* to efficiently define the kinds of processes you typically run. All process definitions are grouped under a specific process type. For example, most SQR reports are defined in the PeopleSoft system with the process type of *SQR Report*, which contains “global” settings that apply to all SQR process definitions under that process type. Within each *process type*, you must define specific *process definitions*, such as an SQR report named XRFWIN, that you could execute on a regular or as-needed basis.

You can also define the servers on which you want to run those process types, or use the server definitions PeopleSoft delivers with Process Scheduler. You’ll need to analyze the processes you plan to schedule and group them logically—both to maximize server resources and to simplify procedures for users. Typically, a developer will need to establish Process Scheduler definitions only once and maintain them as needed.

There are also other factors that you should consider when incorporating Process Scheduler into your applications, such as third party API support for COBOL, and SQR. You’ll also need to become familiar with the types of PeopleCode you can employ to interact with Process Scheduler. This section provides all the information an applications developer using PeopleTools will need to successfully integrate Process scheduler into their applications. But, first you’ll want to become familiar with Process Scheduler’s development interface.

Defining Your Processes and Jobs

You use Process Scheduler to set and create Process Types, Process Definitions, and Job Definitions to integrate Process Scheduler in PeopleSoft applications from your browser.

The different pages that make up Process Scheduler enable you to define the table entries that drive Process Scheduler. The following options are used to set your processes:

Process Type Definitions

Process Type Definitions are the global definitions for processes. Use this option to define or update process types.

Process Definitions

Process Definitions are the settings specific to a processes. Select this menu option to define or update process definitions

Job Definitions

Job Definitions allow you to group processes together. Select this menu option to define or update job definitions.

Recurrence Definitions

These definitions describe processes or jobs that run on a recurring basis, such as weekly or monthly. Select this menu to define or update recurrence definitions.

Server Definitions

A server definition refers to an instance of Process Scheduler Server Agent. Select this menu option to define or update process server definitions.

Report Node Definitions

Select this option to define the Report Distribution Node including URL, the home directory, and FTP address. This defines the parameters needed for the Process Scheduler Server Agent to transfer reports and log/trace files to the Report Repository.

Process System Settings

Select this menu option to view or change the last process instance number, as well as the system's default operating system.

Process Request

The Process Request page appears after you select **File, Run** from the Windows client or click **Select** from the Process Request Dialog page. It does not appear when you invoke a process by any other method. The Process Request Dialog allows you to select additional options associated with a particular process request.

Process Monitor

After submitting process requests, you will probably use Process Monitor to view the status of submitted requests.

Report Manager

Report Manager lists all of the reports that you have the security to view, and allows you to see the output and distribute it to others.

Understanding Process Types

The primary purpose of the Process Type Definition is to globally define the command line, parameter list, working directory and other general parameters. This means the information doesn't need to be duplicated for each Process Definition of the same type, and you can vary these global parameters as needed, depending on the target operating system and database platform.

Process Scheduler supports all operating systems and database environments supported by PeopleSoft. However, not every operating system/database environment combination supports every process type. For example, process types of Crystal or PS/nVision are supported on Windows NT operating systems only, but SQR, COBOL, and Application Engine can run on other operating systems, as well.

You can search for an existing process type using:

- Process type.
- Operating system.
- Database type.
- Process type description.

To view an existing process type:

1. Select a Search Type from the drop-down list and enter a corresponding search value.
2. Select the Process from the Process Type column of your search results.

Find an Existing Value

Search By:

Process Type:

[Advanced Search](#)

[Add a New Value](#)

Search Results

[View All](#) First 1-100 of 188 Last

Process Type	Operating System	Database Type	Process Type Description
Application Engine	Client	DB2	Application Engine
Application Engine	Client	Oracle	Application Engine
Application Engine	Client	Informix	Application Engine
Application Engine	Client	DB2/UNIX	Application Engine
Application Engine	Client	Sybase	Application Engine
Application Engine	Client	Microsoft	Application Engine
Application Engine	NT Server	DB2	Application Engine
Application Engine	NT Server	Oracle	Application Engine
Application Engine	NT Server	Informix	Application Engine
Application Engine	NT Server	DB2/UNIX	Application Engine
Application Engine	NT Server	Sybase	Application Engine
Application Engine	NT Server	Microsoft	Application Engine
Application Engine	UNIX	Oracle	Application Engine
Application Engine	UNIX	Informix	Application Engine
Application Engine	UNIX	DB2/UNIX	Application Engine

Search page

The Type Definition page appears in your browser.

Type Definition Page

You use the Type Definition page to enter global definitions for processes. Use this option to define or update process types.

Type Definition Type Definition Options

Process Type: Application Engine
Operating System: Client
Database Type: DB2

Details

Description: Application Engine
Generic Process Type: AppEngine
Command Line: %TOOLBIN%psae.exe
Parameter List: -CT %%DBTYPE%% -CD %%DBNAME%% -CO %%OPRID%% -CP %%OPRPSW%
Working Directory: %DBBIN%
Output Destination:
☒ Restart Enabled

Save Return to Search Add Update/Display

[Type Definition | Type Definition Options](#)

Type Definition page

The command line, working directory and parameter list fields each provide some flexible options for defining processes. Field values can include client and server environment strings, predefined meta-strings, or in-line bind variables. Predefined meta-strings provide runtime values to the definition and support the management of sensitive data, such as passwords, which are not written to the database.

For example, a user's password is not stored with the rest of the command line. Instead, the meta-string %%OPRPSWD%% is stored. The Process Scheduler Server Agent replaces this meta-string with the decrypted password when it submits the process to run.

Description	Description of the definition, if needed.
Generic Process Type	Generic Process Type will be set appropriately according to the type of process you are updating. This can be AppEngine, COBOL, Crystal, Cube, Other, SQR, Winword, or nVision.
Command Line	<p>Command Line points to the executable program PSAE.EXE, a PeopleSoft API program to run Application Engine programs. Enclose local (client) environment strings within a single pair of percent signs: %TOOLBIN%</p> <p>Enclose all server environment strings within a double pair of percent signs: %%TOOLBIN%%</p>
Parameter List	Parameter List contains the string of command line variables passed to the executable
Working Directory	Points to the directory containing the database drivers. The working directory is only applicable to the Client and Windows NT servers.

Output Destination

Specifies the output destination for this process type. It is used for any process definition that specifies *Process Type* as its Output Destination Source, meaning that the process uses the values in the process type definition to determine where to send the output.

Restart Enabled?

Enables a process request to be restarted from Process Monitor.

Currently this option is applicable only to Application Engine process types that complete with a run status of Unsuccessful. Another restriction regarding the ability to restart a process has to do with a user's security profile. Restart is only allowed if the operator or class of operators can currently update a request (Cancel or Delete).

The parameter list for the failed request is modified to append the current process instance prior to assigning a new instance and reinserting the request with a status of Queued. All date/time stamps and runtime variables are reset as appropriate.



This documentation is not a substitute for your Application Engine, COBOL, SQR, or Crystal Reports documentation. If you need additional information about any parameters discussed here, the documentation from the appropriate vendor is your best reference.

Variables

Process Scheduler uses a number of variables during run time. These are in the form of meta-strings, in-line bind variables, or client/server variables.

For each process request, all defined variables are evaluated and expanded, if possible. (For security reasons, %%OPRID%% is not expanded.) All variables not resolved through any of these sources might cause the process request to fail. Unresolved variables are easy to detect by reviewing the Process Request Detail page for the failed request.

Meta-Strings

The predefined meta-strings must also be enclosed in a set of double percent signs. When processing a request, if Process Scheduler encounters a string enclosed inside a double set of percent signs, it first compares the variable name with an internal list of predefined meta-strings. If the variable name is not one of these meta-strings, it is assumed to be a server-based environment variable. The following list includes all predefined meta-strings and their associated runtime values.

<i>Predefined Meta-String</i>	<i>Is Replaced With</i>
%%ACCESSID%%	Database Access ID.
%%ACCESSPSWD%%	Database Access Password.
%%DBNAME%%	Database Name.
%%INSTANCE%%	Process Instance.
%%OPRID%%	User's Signon ID.
%%OPRPSWD%%	User's Password (encrypted).
%%OUTDEST%%	Output Destination (C:\%TEMP%; \\PrintServer1\Printer1).
%%OUTDESTTYPE%%	Output Type (File; Printer; Window, Email).
%%OUTDESTFORMAT%%	Output Format (SPF; HTM; PDF; TXT; and so on).
%%PRCSNAME%%	Process Name (XRFAPFL, GLPJEDIT).
%%RUNCNTLID%%	Run Control ID (NTClient, CrystalServer).
%%SERVER%%	Reference the Database Server Name.
%%EMAILID%%	Users email Address stored in Manage Security.
%%CLIENTTIMEZONE%%	The time zone specified for the client initiating the request.
%%APPSERVER%%	Application Server (used for three-tier.)
%%LOG/OUTPUT DIRECTORY%%	Directory in the Process Scheduler Server Agent where a file generated from a process request is written.
##DEFAULTPRINTER\$\$	The default printer defined in Process Scheduler Configuration file.

Client and Server Environment Strings

Client variables must be enclosed in a *single* set of percent signs, as in %OutputDirectory%. Process Scheduler tries to resolve these by looking in the PeopleSoft Configuration Manager. If the variable is not found in Configuration Manager, it tries to find an Operating System environment variable. If none is found it leaves the value unresolved.

Server variables must be enclosed in a set of *double* percent signs, as in %%OutputDirectory%%. At runtime, Process Scheduler first looks at all double-percent variables to determine if these represent a predefined meta-string value, such as %%OPRID%%. Because the meta-string is predefined, it can resolve the variable at initiation of each request. If the variable is not defined as a meta-string, Process Scheduler tries to find it in the Process Scheduler Configuration file. If none is found it leaves the value unresolved.

In-Line Bind Variables

The parameter list may contain in-line bind variables. In-line bind variables represent any field (record.field) used in the current page, and are defined as follows:

:RECORD.FIELD

For example, you would specify the following to pass the value of the user ID field from the RPT_RQST_WRK record as a parameter:

:RPT_RQST_WRK.OPRID

Type Definition Options Page

For DB2 processes on MVS platforms, you enter a Job Shell ID that relates the process type to the JCL shell that contains the replaceable parameters for the process.

The screenshot shows the 'Type Definition Options' page. It features a tabbed interface with 'Type Definition' and 'Type Definition Options'. The 'Type Definition Options' tab is selected, showing fields for 'Process Type' (Application Engine), 'Operating System' (Client), and 'Database Type' (DB2). Below these is a section for 'OS390' with a 'Job Shell ID' field. At the bottom, there are buttons for 'Save', 'Return to Search', 'Add', and 'Update/Display', along with a link to 'Type Definition | Type Definition Options'.

Type Definition Options page

OS390

Job Shell ID

ID that relates the process type to the JCL shell that contains the replaceable parameters for the process

Defining Process Types

There must be a process type defined for each database and operating system platform on which you want processes to run. PeopleSoft delivers process type definitions for many types of Application Engine, SQR, COBOL, and Crystal processes, so if you're adding a new *process* definition, it's likely that you can associate it with an existing *process type*, rather than having to add a new process type definition.



Important! Insert *two colons (::)* to define a colon in any variable string, as in `C::|PT80\<executable>` if not using the `%%<value>%%` variable. The extra colon is required to distinguish these types of parameters from in-line bind variables, which use a single colon to prefix the record name.

To update an existing Application Engine process type definition:

3. Select PeopleTools, Process Scheduler Manager, Use, Process Types.
4. Select Application Engine as the Process Type, NT Server as the operating system, and Microsoft as the database type.
5. Select OK.

Generic Process Type	Set to Application Engine.
Command Line	Points to the executable program PSAE.EXE. It is prefaced by the directory name or environment string where the executable resides.
Parameter List	(See next step.)
Working Directory	Must point to the directory containing the database drivers.
Output Destination	Not required for Application Engine.

6. PSAE.EXE requires the following arguments that you need to specify in the Parameter List.

Following these arguments, you can add additional arguments as needed. Use the tables in the following sections for details on the required and optional arguments. The arguments apply to all Application Engine process requests.

`-CT MICROSOFT -CD %%DBNAME%% -CO %%OPRID%% -CP %%OPRPSWD%% -R %%RUNCNTLID%% -I %%INSTANCE%% -AI %%PRCSNAME%%`

Flag	Values and Notes
-CT	Connect database type.
-CS	Connect server name if required in logon dialog page.
-CD	Database you are connected to.
-CP	User ID you are signed on as.
-I	Process Instance.
-AI	The name of the Application Engine program.

Flag	Values and Notes
-DEBUG	Enable Application Engine trace. This is equivalent to values assigned to TraceAE in the Process Scheduler Configuration file.
-DBFLAGS	Bit flag to indicate the enable/disable running statistics to a table when the meta-SQL %Update Stats% is coded in the AE program. 0 = Enable 1 = Disable
-TOOLSTRACESQL	Enables PeopleSoft SQL trace. This is equivalent to values assigned to TRACESQL in the Process Scheduler Configuration file.
-TOOLSTRACEPC	Enable PeopleCode trace. This is equivalent to values assigned to TracePC in the Process Scheduler Configuration file.

To update an existing SQR Report Process Type Definition:

7. Select Process Type Definitions.
8. In the search page, select Process Type, Operating System, Database Type, or Process Type Description.

Search page

9. Select a value from the list of search results.

The Type Definition page appears.

Type Definition

Type Definition Options

Process Type:

SQR Process

Operating System:

NT Server

Database Type:

Microsoft

Details

Description:

SQR Process

Generic Process Type:

SQR

Command Line:

%%TOOLBIN%%\PSSQR.EXE

Parameter List:

-CT %%DBTYPE%% -CS %%SERVER%% -CD %%DBNAME%% -CA %%ACCESSE

Working Directory:

Output Destination:

☐ Restart Enabled

Save

Return to Search

Add

Update/Display

Type Definition | [Type Definition Options](#)

Type Definition page

Description	Add a unique description for the definition if needed.
Generic Process Type	Select the type of process you are updating.
Command Line	Points to the executable program PSSQR.EXE, a wrapper program to run SQR reports.
Parameter List	(See next step)
Working Directory	Needs to point to the directory containing the database drivers.
<div>Note. The working directory is only applicable to the Client and Windows NT servers.</div>	
Output Destination	Specifies the output destination for this process type. It will be used for any process definition that specifies <i>Process Type</i> as its Output Destination Source, meaning that the process will use the values in the process type definition for where to send the output.

10. PSSQR.EXE requires the following arguments in the Parameter List.

Following these arguments, you can add additional arguments as needed. Use the tables in the following sections for details on the required and optional arguments. The arguments apply to *all* SQR process requests.

-CT %%DBTYPE%% -CS %%SERVER%% -CD %%DBNAME%% -CA
%%ACCESSID%% -CAP %%ACCESSPSWD%% -RP %%PRCSNAME%% -I
%%INSTANCE%% -R %%RUNCNTLID%% -CO %%OPRID%% -OT

%%OUTDESTTYPE%% -OP "%%OUTDEST%%" -OF %%OUTDESTFORMAT%%

Flag	Values and Notes
-CT	Connect database type.
-CS	Connect server name if required in the logon page.
-CD	Database you are connected to.
-CA	Access ID you are signed on as.
-CAP	Access Password (encrypted).
-CP	User ID you are signed on as.
-I	Process Instance.
-RP	The name of the report (.SQR) file. No path is required. PSSQR searches for the SQR Report in configuration setting PSSQR1-4.
-OT	1 = Printer, 2 = File, 3 = Window, 4 = Email.
-OP	If Output Type = 1(printer), then you can specify a logical printer name, such as \\printserver1\printer1. If Output Type = 2 (file), you must specify a file path.
-OF	Specifies the output destination format, such as HTML.

You can determine the output format for the output file by specifying the output format on the Process Scheduler Request page.

To update an existing COBOL SQL Process Type Definition:

11. Select Use, Process Types, Update/Display.
12. In the Update/Display – Process Types page, select **COBOL SQL** as the Process Type, **NT Server** as Operating System and **Microsoft** as Database Type.
13. Click OK.

Type Definition | Type Definition Options

Process Type: COBOL SQL
Operating System: NT Server
Database Type: Microsoft

Details

Description: COBOL SQL

Generic Process Type: COBOL

Command Line: %%CBLBIN%%\%%PRCSNAME%%.EXE

Parameter List: %%DBTYPE%%/%%DBNAME%%/%%OPRID%%/%%OPRPSWD%%/%%RUNCN

Working Directory: %%DBBIN%%

Output Destination:

☐ Restart Enabled

Save Return to Search Add Update/Display

[Type Definition](#) | [Type Definition Options](#)

Type Definition page

The Type Definition page contains the following options for COBOL SQL.

Generic Process Type	Set to COBOL.
Command Line	Points to the command to start the Windows-based COBOL program prefaced by its directory name or environment string that indicates where the executable resides.
Parameter List	The Parameter List allows you to define the runtime parameters that need to be passed to your process.
Working Directory	Needs to point to the directory containing the database drivers.
Output Destination	Not applicable for COBOL.

To update an existing Crystal Process Type Definition:

14. Select Use, Process Types, Update/Display.
15. In the Update/Display – Process Types dialog, select **Crystal** as the Process Type, **NT Server** as Operating System and **Microsoft** as Database Type.
16. Click OK.

Type Definition	Type Definition Options
Process Type:	Crystal
Operating System:	NT Server
Database Type:	Microsoft
Details	
Description:	Crystal
Generic Process Type:	Crystal
Command Line:	%%TOOLBIN%%\PSCRRUN.EXE
Parameter List:	-CT%%DBTYPE%% -CD%%DBNAME%% -CO%%OPRID%% -CP%%OPRPSWD%%
Working Directory:	%%DBBIN%%
Output Destination:	
<input type="checkbox"/> Restart Enabled	
Save Return to Search Add Update/Display	
Type Definition Type Definition Options	

Type Definition page

Generic Process Type	Set to Crystal.
Command Line	Points to the executable program PSCRRUN.EXE, a PeopleSoft API program to run Crystal reports—prefaced by its directory name or environment string that indicates where the executable resides.
Parameter List	(See next step).
Working Directory	Needs to point to the directory containing the database drivers.
Output Destination	Not required for Crystal.

17. PRCRRUN.EXE requires the following arguments that you need to specify in the Parameter List.

Following these arguments, you can add additional arguments as needed. Use the tables in the following sections for details on the required and optional arguments. The arguments apply to all Crystal process requests.

-CTMICROSFT -CD%%DBNAME%% -CO%%OPRID%% -CP%%OPRPSWD%% -
I%%INSTANCE%% -RP"%%CRWRPTPATH%%\%%PRCSNAME%%" -
OT%%OUTDESTTYPE%% -OP%%OUTDEST%% -
LG:PRCSRUNCNTL.LANGUAGE_CD -OF%%OUTDESTFORMAT%%

Flag	Values and Notes
-CT	Connect database type.

Flag	Values and Notes
-CS	Connect server name if required in the logon (NULL for client requests).
-CD	Database you are connected to.
-CO	User ID you are signed on as.
-CP	User Password (encrypted).
-I	Process Instance.
-CX	Application Server Name (if applicable).
-RP	The name of the report (.RPT) file. A full path is allowed, and the .RPT extension is optional. If no path is given, PSCRRUN looks first in the working directory, if specified. If the file is not found, it searches the directory specified by the configuration manager variable CRWRPTPATH.
-OT	1 = Printer, 2 = File, 3 = Window.
-OP	If Output Type = 1(printer), then you can specify a logical printer name, such as \\printserver1\printer1 If Output Type = 2 (file), you must specify a file path.
-LG	Defines the requested language code for the specified Crystal report. This corresponds to a child directory below the Crystal Reports base directory, where the report should exist in the specified language. Various child directories can exist for each supported language.
-OF	Specifies the output destination format, such as HTML and so on.



Crystal requires the following arguments, Printer Orientation, and any additional arguments, that are report-specific, to be set up in the Process Definition.

Argument	Values and Notes
-ORIENT	NULL, P = Portrait, L = Landscape. If OutputType = 1 (printer), and OutputDestination is not NULL, you must specify a printer orientation. This should be specified as an appended parameter in the process definition.
Additional Arguments	Optional.

You can determine the output format for the output file by specifying the output format on the **Process Scheduler Request** page.



You need to set the following environment strings on the **Crystal** page in Configuration Manager.

<i>Parameter</i>	<i>Description</i>
Crystal EXEs Path	Path to Crystal executables (PSCRRUN.EXE).
Default Crystal Reports	Path to Crystal report (.RPT) files.

Defining Processes

After you've specified a process type, you need to create a process definition, specify any of the available options, and set up any associated page transfers that might apply.

To add a new process definition:

18. Select Process Definitions and click add.

19. Enter the ProcessType and the new Process Name.

This name must match the file name of the process you are defining. For example, if you are defining an SQR report named MYSQL.SQR, you must define the process name as MYSQL.

20. Click Continue.

The Process Definition page appears.

Process Definition page



Note. Process Scheduler satisfies SQR requests only if the requested SQR is found in the Configuration Manager's SQRW Search Path parameter. This prevents users from circumventing security by substituting their own local version of an SQR.

21. Enter a **Description** (and optional **Long Description**) for the process.

22. Specify a Priority level: **High**, **Medium**, or **Low**.

Priority defines the relative priority used by the Process Scheduler Server Agent to determine which process to initiate first if multiple processes are queued to run on a given server.

23. Select the applicable options in the group box to the right.

- **API Aware.** Select this check box if this is an API-aware process. If this option is turned on for any process that is not API aware, Process Scheduler includes this process in the concurrent task count. This can result in improper server load balancing. Selecting this option does not mean your process will become API aware. You still have to add API code to your process.
- **Log Client Request.** Select this check box if you want to provide an audit trail for any processes requested to run on a client workstation. This causes the system to log the request to the Process Request table each time a user runs the process on their client workstation. **Log Client Request** is on by default for all API aware processes, and logging is always performed for all server-based requests.
- **SQR Runtime.** If you select this check box, the system appends *SQT* to the process name in the parameter list on the Process Definitions Options page, and uses the SQT Working Directory specified in the Process Type Definition page.

24. Select Save.



For more information, see Understanding Process Request API Support.

Process Definition Options Page

You can specify that a process runs from a specific location, server, component, or process group.



Note. Client processes can only be run from the **File, Run** menu in the Windows client.

Process Definition Options page showing fields for Process Type (SQR Report), Name (MYSQLR), Run Location (Both), Server Name (NT Server Agent), and Recurrence Name. It also includes lists for Component and Process Groups, and buttons for Save, Add, and Update/Display.

Process Definition Options page

Run Location

Specify *Client*, *Server*, or *Both*.

Server Name




This field is available only when you choose *Server* in the **Run Location** field. Here you can specify a particular server on which the process should run. The **Server Name** should only be specified if you want to restrict *this* particular process to *this* server definition (or if you only have one server platform to submit your requests). Leaving this blank allows the process to be requested for the first server or default operating system that can process requests for the specified Process Class. This allows you to better balance the load between multiple process servers, because your request is initiated by the first available server on the default operating system.

Recurrence Name Here you can specify a predefined Recurrence Definition for the process. (optional)



For more information about recurring processes, see Setting Up Recurrence Definitions.

To complete the Process Definition Options page:

25. Select the run location from the drop-down list.
26. Enter a server name or you may search for an available server by clicking the  button.
27. Enter a recurrence name or search for an available one by clicking the  button
28. You can search for a **Component** to a process definition by clicking the  button.
29. Click the **Add** button to add a component.

Adding a component to a process definition causes that process definition to appear in the Process Scheduler Request page when File, Run is selected within that component, if you have security to run the process. This is how you attach processes to components.

30. Select an existing group from the Process Group drop-down list, or add a new group by entering a unique Process Group for each process definition.

This makes the process definition a member of that group. A process definition might be a member of multiple Process Groups. Process Groups are then assigned to Security Profiles in Security Administrator. This allows you to specify the process requests that particular classes of operators can run.

31. Click Save.

Override Options Page

The Override Options page enables you to modify the Parameter List, Command Line, or Working Directory values passed to the process.

Process Definition Options Override Options Destination Page Transfer Notification

Process Type: SQR Report
Name: MYSQL

Override Options

'Parameter List: None [text input]
'Command Line: None [text input]
'Working Directory: None [text input]

Save Add Update/Display

Override Options page

If you have any custom values that you need to send, you have the following options in your Parameter List:

- **Override.** Sends your custom parameters in place of the PeopleSoft defaults.
- **Append.** Adds your custom parameters to the front of the PeopleSoft string.
- **Prepend.** Adds your custom parameters to the end of the PeopleSoft string.

Destination Page

The Destination page lists everyone who has access to the report in Report Manager. Use this page to select the distribution of your report.

Process Definition Options Override Options **Destination** Page Transfer Notification

Process Type: SQR Report
Name: MYSQLR

Output Destination Options

Type: Any
Destination Source: User Specified
Output Destination:

Save Add Update/Display

Destination page

The output source destinations are enforced for any user who is *not* allowed to override the output destination by their Operator Process Profile. If a user is allowed to override it, the user run control destination is used in the process request. For an SQR process, the **Destination Source** needs to be set to *User Specified*.

- **Type.** This is where you can specify a particular type of output for each Process Definition. This defines the default destination type for this process. *None* defaults to the operator run control values. *Any* means the user can specify any valid option. The *Default* option is applicable to nVision only. You can select *Email*, *File*, *Printer*, *Web*, or *Window*, depending on the type of process.
- **Destination Source.** This is where you select how the output destination is determined, by the user on the Process Request page, by a value in the Process Type Definition, or by a value in the Process Definition. The purpose of this field is to add flexibility in determining the output destination. Essentially, it enables you to restrict this process request output to be designated by either the process type definition or the process definition. Setting source to *User Specified* permits users to provide an output destination at run time.

Output Destination Source	Description
None	Use this for any processes that do not create output, or for those processes for which you do not want the output file or report produced.
Process Definition	This request defaults to use the output destination specified by the process definition.
Process Type Definition	This request defaults to use the output destination specified by the process type definition.

User Specified	This is the default; the output destination for this request is determined by the process run control designation.
----------------	--

Output Destination. This edit box is only enabled when the Source value equals Process Definition. This is where you can hard code the output destination into the Process Definition.

Page Transfer Page

After submitting process requests, you will probably use Process Monitor to view the status of submitted requests. When Process Monitor shows you that a process has completed successfully, it can be useful to go directly from Process Monitor to the appropriate page in your PeopleSoft application to view the results of the completed process. To enable users to go directly to a page from the Process Monitor, you need to specify the appropriate values on the **Page Transfers** page.

The Page Transfer or Log Transfer feature uses the values that you enter on this page to arrive at a particular page within a PeopleSoft application. You specify the navigational route that an end user must follow to arrive at the same page using the PeopleSoft menu interface.

The screenshot shows the 'Page Transfer' tab in a PeopleSoft application. The 'Process Type' is 'SQR Report' and the 'Name' is 'MYSQR'. Under 'Page Transfer Information', the 'Page Transfer Code' is set to 'None'. There are input fields for 'Menu Name', 'Menu Bar Name', 'Menu Item', and 'Page Name'. The 'Menu Action' is set to 'Update'. At the bottom, there are buttons for 'Save', 'Add', and 'Update/Display'.

Page Transfer page

To set up page transfer options:

32. From the **Page Transfer Code** drop-down list, select the type of transfer you want to supply for the process request.

If you want the user to access a page in the PeopleSoft application, select *Next Page*.

33. Search for a **Menu Name**.

34. Search for a **Menu Bar Name**.
35. Search for the **Menu Item**.
36. Search for the appropriate **Panel Name**.
37. From the **Menu Action** drop-down list specify which action to perform when a user selects the page.

Notification Page

The Notification page lets you send messages to a group (using role ID) or individuals (using user ID) when a specific activity occurs with the process, such as an error or a successful completion of the job.

ID Type	Distribution ID	On Error	On Success	Disabled	
Role	Benefits Administrator	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+ -
User	8001	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	+ -

Save Add Update/Display

Notification page

ID Type	Select a user or role ID
Notify ID	The actual user ID or the name of the role.
On Error	Send message to the notify ID if there is an error in the process.
On Success	Send message to the notify ID when the process successfully completes.
Disabled	Check this box if you do not want to send notifications to users specified on this line.

Defining Jobs

Process Scheduler gives you the ability to schedule run one or more processes as a group.

In the context of Process Scheduler, the terms process and job have distinct meanings. A process is a single task, program, or routine, such as an SQR report or COBOL program that runs either on the client or on a server. A *job* is comprised of a group of processes that all get submitted as a unit. A job is defined as one or more processes of the same or different types that can run either in series or parallel.

Prior to creating a Job Definition you must have already defined all of the individual processes that you are going to include in the Job.



Jobs cannot run on the client. Jobs require the scheduling support that only a server environment can offer. Also, only API-aware processes are allowed in Job Definitions. All processes within a job request notify the server of the run status when they complete. This is how the decision is made to continue with the next job process.

Job Definition Options			
Process Type:	PSJob		
Job Name:	ALLTYPES		
Description:	All Process Types		
Run Mode:	Serial		
Priority:	Medium		
Process List			
Process Type	Process Name	Description	Run Always
1 COBOL SQL	PTPTEDIT	TSE Edit/ErrorLog Validation	<input type="checkbox"/> + -
2 Crystal	XRFAPFL	Applications and Fields Cross	<input type="checkbox"/> + -
3 SQR Report	XRFAPFL	Applications and Fields Cross	<input type="checkbox"/> + -
4 Database Agent	RPTDLVRY	Report Delivery	<input type="checkbox"/> + -

Save Return to Search Add Update/Display

Job Definition page

Description

Text that identifies how the job is used.

Run Mode

Select **Serial** to have each process in your job run sequentially. Select **Parallel** if you don't have a requirement for the processes to run in a certain order. If you select **Parallel**, the **Run Always** flags for *all* of the processes are selected.

Priority

Select **High**, **Medium**, or **Low**. Process Scheduler will initiate the job with the highest priority first.

Run Always

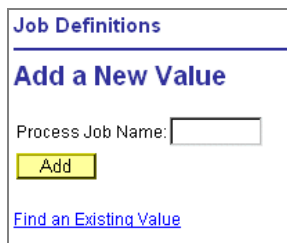
Run Always allows the next process in the queue to run regardless of whether the previous process ran successfully.

The Process List shows all processes that are associated with this job. You can add or delete a process by selecting the appropriate button from this page.


To create a new job definition:

38. From the Job Definition search page, select Add a New Value.

The Add a New Value page appears.



Job Definitions – Add a New Value page

39. Enter a name for the new job definition in the Process Job Name edit box, and click Add.
40. Enter a Description of the job that identifies how it's used.
41. Specify the Run Mode as Serial or Parallel.
42. Select a processing Priority for the job: High, Medium, or Low.
43. From the Process Type drop-down list, select the process you want in the order you want them to execute.
44. To add additional rows or processes, click the  Insert Row button that precedes the location of where you want the new row.
45. Select the Job Definition Options tab to select a Server Name and a Recurrence Name.

Job Definition Options Page

Use this page to define jobs that you will run on a regular basis.

Job Definition Options Job Distribution Job Notification

Process Type: PSJob
 Job Name: ALLTYPES
 Description: All Process Types
 Run Mode: Serial
 Priority: Medium

Process List					
	Process Type	Process Name	Description	Run Always	
1	COBOL SQL	PTPTEDIT	TSE EditErrorLog Validation	<input type="checkbox"/>	+ -
2	Crystal	XRFAPFL	Applications and Fields Cross	<input type="checkbox"/>	+ -
3	SQR Report	XRFAPFL	Applications and Fields Cross	<input type="checkbox"/>	+ -
4	Database Agent	RPTDLVRY	Report Delivery	<input type="checkbox"/>	+ -

Save Return to Search Add Update/Display

Job Definition Options page

Server Name Enter a **Server Name** if you want to require this job to run on a specific server only. If you leave the **Server Name** blank, the job finds an available server on which to run, based on the Process Class.

Recurrence Name You can optionally choose a **Recurrence Name** for running at previously defined intervals.

Component This makes the job definition a member of that component. Adding a Component to a job definition causes that job definition to appear in the Process Scheduler Request page when you select File, Run within that component group, if you have security to run the process. To add new rows, click the add button.

Process Groups A job definition may be a member of multiple Process Groups. Process Groups are assigned in Security Administrator. This allows you to specify the process requests that particular classes of operators can run. To add new rows, click the add button.



For more information about recurrence definitions, see Setting Up Recurrence Definitions.

To complete the Job Definition Options page:

46. Enter a server name or you may search for an available server by clicking the button.
47. Enter a recurrence name or search for an available one by clicking the button

48. Select the **Component** associated with the job definition.
49. Select an existing group from the Process Groups drop-down box, or add a new class by entering a unique Process Group.

Job Distribution Page

This page enables you to set up a distribution list for your jobs based on role or user ID.

Job Distribution page

Override Distribution List from Processes in Job

Check this box to use the distribution IDs from the Job definition. If the box is unchecked, distribution IDs from both the Job and Process definitions are used.

ID Type

Role or user ID

Distribution ID

The actual user ID or the name of the role.

Job Notification Page

This page enables you to set up a list of users to be notified if a process errors out, successfully completes, or is disabled. Set up the list based on role or user ID.

Job Definition Options Job Distribution Job Notification

Process Type: PSJob
Job Name: ALLTYPES All Process Types

☐ Override Notification List from Processes in Job List

ID Type	Distribution ID	On Error	On Success	Disabled
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Save Return to Search Add Update/Display

Job Notification page

Override Notification list from Processes in Job List

Check this option to notify only the users specified in the Job definition. If unchecked, users specified in the Job *and* Process definitions are notified.

ID Type

Select a user or role ID

Notify ID

The actual user ID or the name of the role.

On Error

Send message to the notify ID if there is an error in the process.

On Success

Send message to the notify ID when the process successfully completes.

Disabled

Check this box if you do not want to send notifications to users specified on this line.

Setting Up Recurrence Definitions

If you just submit an ad hoc process request, typically you just need to create a recurrence entitled something like *Once*, and use it for process requests that are for a one-time or unique need. On the other hand, there are other process requests and jobs that you run on a regular basis like payroll or inventory. For these regular process requests and jobs, you want to create a Run Recurrence that reflects the needs of your particular requirements. For example, if you run payroll once a month, then you can set the Run Recurrence to reflect that requirement.

Run Recurrence enables you to make sure that important process requests and jobs that you need to run on a regular basis will *always* run—automatically—in the background. This eliminates the possibility of anyone forgetting to submit a process request or incorrectly submitting one. Once

you specify a Run Recurrence, the process request will continue the cycle until you manually stop it.

As an end user, in most cases you don't have to modify the Run Recurrence on a job or process request. Typically your application development team is responsible for specifying Run Recurrence. In most cases, you just select an existing Run Recurrence and submit the process request.

Using the Run Recurrence page, you create your Recurrence Definitions.

Recurrence Definition page

Recurrence Name	This is the value that appears in Process Definitions and Job Definitions. So it should be something readily identifiable.
Description	Use this field to add more detail to identify your Recurrence Definition, if needed.
Recurrence Pattern	Your choice of Daily, Weekly, or Monthly.
Start Request	Enter the effective date and time when the Recurrence Definition should become active.
Repeat	Indicates how many times the process will repeat. For example, you could specify that the process run every 10 minutes for an hour.
Start Next Recurrence when	Indicates if you'd like the next recurrence to start after the previous one has finished or to run regardless as it is scheduled

Recurrence Patterns

Daily

Choice of **Every Day** or **Every Weekday**.

Recurrence Pattern	
<input checked="" type="radio"/> Daily	<input checked="" type="radio"/> Everyday
<input type="radio"/> Weekly	<input type="radio"/> Every Weekday
<input type="radio"/> Monthly	

<input checked="" type="checkbox"/> Sunday	<input checked="" type="checkbox"/> Monday	<input checked="" type="checkbox"/> Tuesday	<input checked="" type="checkbox"/> Wednesday
<input checked="" type="checkbox"/> Thursday	<input checked="" type="checkbox"/> Friday	<input checked="" type="checkbox"/> Saturday	

Weekly

You may choose one or more days on which to run a process. For instance, you can define the process to run every Friday or weekly every Monday, Wednesday, and Friday.

Recurrence Pattern				
<input type="radio"/> Daily	<input checked="" type="checkbox"/> Sunday	<input checked="" type="checkbox"/> Monday	<input checked="" type="checkbox"/> Tuesday	<input checked="" type="checkbox"/> Wednesday
<input checked="" type="radio"/> Weekly	<input checked="" type="checkbox"/> Thursday	<input checked="" type="checkbox"/> Friday	<input checked="" type="checkbox"/> Saturday	
<input type="radio"/> Monthly				

Monthly

You can specify a specific numerical date every month or you can set a recurrence of the 1st, 2nd, 3rd, 4th, of Last <day> of the month.

Recurrence Pattern	
<input type="radio"/> Daily	
<input type="radio"/> Weekly	
<input checked="" type="radio"/> Monthly	<input type="radio"/> Day of Month <input type="text"/> <input type="radio"/> The <input type="text" value="1 st"/> <input type="text" value="Thursday"/>

The following procedure describes how you create a Recurrence Definition.

To create a Recurrence Definition:

50. Select Use, Recurrence Definition, Add.
51. Enter a name for the new definition.
52. In the Description edit box, you can add more detail to identify your Recurrence Definition if needed.
53. Select a Recurrence Pattern.
54. In the Start Request group, indicate when you want the Recurrence Definition to become valid.
55. In the Repeat group, indicate how many times the process repeats.
56. In the Start Next Recurrence when group indicate if you'd like the next recurrence to start after the previous one has finished or to run regardless as it is scheduled.

Setting Up Server Definitions

In most network environments, you identify certain servers to perform processes to better balance the workload on your system. As you're determining which processes you want to schedule through Process Scheduler, you should also identify those servers slated to run specific types of processes. For example, you might want to have one server called RPTSRV to handle all reports, and another to handle all journal posting.

Server Definition
Distribution
Notification

Server Name: PSNT

Description:
'Sleep Time: Seconds
'Heartbeat: Seconds
Max API Aware: Concurrent Tasks
'Operating System:

Purge Options
Days Before Purge:
Purge Process Files ☐

Process Types run on this Server

'Process Type		'Priority	'Max Concurrent		
Application Engine	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>
COBOL SQL	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>
Crw Online	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>
Crystal	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>
Cube Builder	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>
Database Agent	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>
Message Agent API	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>
NVSDRILL	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>
PSJob	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>
SQR Process	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>
nVision-ReportBook	<input type="text"/>	Medium	3	<input type="button" value="+"/>	<input type="button" value="-"/>

Server Definition page

Server Name Distinct name of the server.

Description Description of the server to identify how it is used.

Sleep Time

Since the Process Scheduler Server Agent is a program that runs in the background on a server, it should not run continuously. You need to schedule a sleep time to control the activity of the Process Scheduler Server Agent. A sleep time refers to the number of seconds you want the Process Scheduler Server Agent to “sleep” or wait before it checks for queued process requests in the Process Request table. When it wakes up, it checks to see if any processes have been queued in the Process Request table and need to be run on this process server.

For example, if you set **Sleep Time** to 15 seconds and no process is queued, it wakes up every 15 seconds and check for queued processes. If it finds some work, it processes all that’s possible in 15 seconds and goes back to sleep. If the work isn’t completed, it continues from the point at which it left off and works on it again for the next 15 seconds, then goes back to sleep. The sleeping/polling process continues until a database or server administrator manually shuts down the Process Scheduler Server Agent.

Note. Depending on the server platform, you typically don’t set **Sleep Time** at any lower than ten seconds. Between 15 and 30 seconds is generally recommended for most PeopleSoft applications. The maximum sleep time is 9,999 seconds (about two hours and twenty-six minutes).

Heartbeat

The Process Scheduler Server Agent uses this value to track server status—running, down, or suspended. Each time the server issues a **Heartbeat** message, it updates the last update date/time stamp field in the Server Status table with the current date and time. This prevents the database from accepting more than one Process Scheduler Server Agent with the same name.

Max API Aware

An API-aware task is a process that properly updates its process status through the type-specific API provided, such as SQR, COBOL, and Crystal. It is the responsibility of the application process to update the Process Request table with status information.

Operating System

The name of the operating system.

Purge Options

Days Before Purge indicates the number of days before a Process Request is removed from the Process Request table. This helps to reduce clutter in table. Process Scheduler uses this value when it performs a purging of old requests at startup.

If you check **Purge Process Files**, your process files are purged during the normal purge process.

Process Types

Each Process Definition belongs to a Process Type. When you define a server definition, you select which Process Types the server should process. This allows for server load balancing in that you can direct particular processes to a specific server.

Priority

This provides the ability to prioritize all processes queued to run on a given server as **High**, **Medium**, and **Low**.

Max Concurrent

Max concurrent is similar to **Max API Aware**, except that it controls how many processes of a particular process class may run concurrently on the server.

To add a process server definition:

57. Select Use, Process Servers, Add.
58. In the Server Name edit box, enter a name for your server, and click OK.
59. On the **Server Definition** page, enter a **Description** of the server to identify how it will be used.
60. Enter a **Sleep Time** value.
61. Specify the frequency, in seconds, in which you want the Process Scheduler Server Agent to register a **Heartbeat**.
62. Indicate the maximum number of API-Aware processes can run concurrently (**Max API Aware**).



For more information, see to API Aware vs. Unaware.

63. Select the appropriate **Operating System**.
64. In the **Days Before Purge** edit box, indicate the number of days that should pass before a process should be physically deleted from the request table.
65. Select a Process Type.
66. Select a processing Priority for this type of process: **High**, **Medium**, or **Low**.

67. Select **Max Concurrent** (maximum concurrent) settings.

Max concurrent is similar to **Max API Aware** except that it controls how many processes of a particular process class may run concurrently on the server.

68. After creating the Server Definition, you then need to configure the Process Scheduler Server using PSADMIN.



For more information about configuring your servers and starting Process Scheduler, see *PeopleSoft Installation and Administration* for your database platform.

Server Distribution Details

This page contains the settings that your server uses in transferring output to Report Manager.

Distribution Node Name Select the name of your Report Node.

Maximum Transfer Retries Enter the number of times that the server can try to send a report to Report Manager before it errors out.

Interval for Transfer Attempt Enter the number of seconds that must pass before the server tries to transfer the report again.

The screenshot shows the 'Server Distribution Details' configuration page. At the top, there are three tabs: 'Server Definition', 'Distribution', and 'Notification'. The 'Distribution' tab is selected. Below the tabs, the 'Server Name' is set to 'PSNT'. A section titled 'Server Distribution Details' contains the following fields: 'Distribution Node Name' with a text input and a magnifying glass icon; 'Maximum Transfer Retries' with a text input; 'Interval for Transfer Attempt' with a text input followed by the word 'seconds'; and a checkbox labeled 'Transfer Log Files to Report Repository' which is currently unchecked. At the bottom of the page, there are four buttons: 'Save', 'Return to Search', 'Add', and 'Update/Display'.

Distribution page

Server Notification

Use this page to enter a distribution list of those individuals or roles that should be notified when the server is down, has errors, and so on.

Server Name: PSNT

Notify Users/Roles on Server Status						
ID Type	Distribution ID	Server Errors	Down	Started	Suspended	Disabled
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Save Return to Search Add Update/Display

Notification page

Setting Up the Report Node

The Report Distribution Node defines how your reports are moved to the Report Repository where you can view them from Report Manager. Reports are moved using either XCOPY or FTP, depending on the type of server you are using.



For more information about setting up the Distribution Node, see Setting Up Report Distribution.

You need determine which transfer protocol you want to use to transfer the files. If you have an NT Process Scheduler and an NT Web Server, you have an option of doing either XCOPY or FTP. If you have an NT Process Scheduler and a Unix Web Server, you must use FTP. (The FTP daemon must have been setup in your Web Server.) If you use XCOPY, the Report Repository directory must be a shared drive in your network.

If you have a Unix Process Scheduler, you must use FTP protocol to transfer to the Web Server.

Report Node Definitions

Node Name: PS1

Distribution Node Details

URL:

Home Directory:

Description:




Operating System:

FTP Information

FTP Address: **Password:**

FTP ID: **Confirm Password (Encrypted):**

Network Path:

 Save  Add  Update/Display

Distribution Node page

Defining System Settings

Process Scheduler maintains a single-row table that stores system-wide parameters and system defaults related to all processes. Select **Use, Process System** to open the Process System page, where you can view or change the last process instance number, as well as the system's default operating system.

System Settings

Default Settings


Last Process Instance:

Last Report ID:


Retention Days:


Operating System:

Purge Options

Next Purge Date: 

Next Purge Time:

Recurrence: 

 Save

Process System page

Last Process Instance

The Instance number of the last process. This acts as a counter and shows the last process instance used. All jobs receive a process instance number

Last Content ID	The Content ID of the last process. This acts as a counter and shows the last Content ID used. All jobs receive a number when sent to the Report Repository.
Retention Days	The number of days before the files left on the report server are deleted. This value is used to calculate the expiration date on reports in Report Manager.
Operating System	A run location of <i>any</i> picks a server of this type. This is your default operating system.
Next Purge Date	The scheduled date for the next file purge process to be run on the server.
Next Purge Time	The scheduled time for the next file purge process to be run on the server.
Recurrence	Select a recurrence for the purge process.

Defining Batch Timings

Application Engine is PeopleTools' own development tool that provides an alternative to writing batch programs in SQR or COBOL. Because we want Application Engine programs to run in the most efficient manner, we provide the Batch Timings reports so that you can monitor the performance of your Application Engine programs.

In order for the Batch Timings feature to record any data, you must first enable it using the Configuration Manager Trace tab. In the Application Engine group you need to select one of the Statement Timings options.

Batch Timings

Run Control ID: PS1 [Report Manager](#) [Process Monitor](#) [Run](#)

'Report Type: Summary

Batch Timings For

Run Control ID:

Process Instance:

[Save](#) [Add](#) [Update/Display](#)

Batch Timings page

The Process Scheduler Batch Timings page applies to the Statement Timings data that is stored in the (table) option. Keep in mind that whenever you run an Application Engine program, and the Statement Timings trace options are enabled, you can always view the Batch Timings results using the Process Monitor.

From this page you can select the type report that you want to generate based on the data stored in the batch timings table. Use the **Report Type** drop-down list to choose either **Summary** or **Detail**. The **Detail** option provides a report on a specific run, or Process Instance of an Application Engine program. The **Summary** option provides a report on all of the runs initiated by a particular run control ID.

So, depending on the option you selected in Report Type, you enter in the **Batch Timings For** group. For a **Summary** report, select the run control ID for which you need the data. For a **Detail** report, supply the exact Process Instance of the Application Engine program for which you need performance data.

Understanding Process Request API Support

Process Scheduler requires that all API-aware process requests (such as COBOL programs, SQR reports, and Crystal reports) interface with Process Scheduler and Process Monitor by properly integrating calls to the provided API modules. This is necessary to inform Process Monitor about the current status of a given request once the Process Scheduler client or Process Scheduler Server Agent initiates it.

PeopleTools provides two standard APIs for Process Scheduler, one to support COBOL processes, the other to support SQR processes. The API interfaces for COBOL and SQR enable the process request to update run status, completion code, message set, and message number. They also allow you to pass up to five free form parameters, which you can use with MsgGet (Message Get) and MsgGetText (Message Get Text) PeopleCode to display messages while the process is running. To ensure that the request is physically updated, the API-aware process must perform the API call just before it COMMITs processing.



Because Application Engine, Crystal, and nVision requests are handled through an internal API, they are already “API aware” and do not require API interface calls.

Should any process that updates the database reach an exception that requires abnormal termination and rollback of prior updates, your code should perform the rollback, then use the API to update the run status to unsuccessful, commit this update, then terminate. You indicate that a process is API aware when you create the process definition.

All requested tasks selected from “Queued” status are updated by Process Scheduler/Process Scheduler Server Agent to “Initiated” before submitting the request to run. If the requested task fails before loading successfully—as can be the case with SQR, which must compile successfully before running—the run status remains “Initiated” and has to be reset to “Cancel” through Process Monitor. Tasks that terminate for any reason, leaving the run status of “Initiated” or “Processing,” automatically have this status reset by the Process Scheduler Server Agent to “Error.” Because the Process Scheduler Server Agent performs this function, it must be actively polling for requests.

The table below shows the PeopleTools-based APIs provided, including the module name for easy reference on how to implement the API.

Generic Process Type	API module	Reference
COBOL	PTPUSTAT.CBL	PTPTEDIT.CBL
SQR	PRCSAPI.SQC	XRFWIN.SQR
Crystal	PSCRRUN.CPP	N/A
Workflow	PSDBA.CPP	N/A
Application Engine	PSAE.CPP	N/A



Application development teams working with PeopleSoft applications should ensure that these APIs are properly included in their batch program code. You need to ensure not only that all normal program exits are coded to handle API run status updates (“Successful”), but that all program exceptions are trapped and the run status updated correctly (“Unsuccessful” or “Error”) before program termination.

API Aware vs. Unaware

An API aware task is a process that properly updates its process status through the type-specific API provided, such as COBOL and Crystal. It is the responsibility of the application process to update the Process Request table with status information.

API *unaware* tasks are programs that have no defined program interface to Process Scheduler, such as CLOCK.EXE or WINWORD.EXE. Because API-unaware tasks do not update the Process Request table, the PeopleSoft system can not determine if the process completed successfully. As a result, all API-unaware processes show a Run Status of *Success* to indicate that they initiated successfully. Keep in mind that a status of *Success* with an API-unaware process does not necessarily indicate the process completed successfully.

API-unaware processes that are logged or monitored require manual clean up. That is, you have to manually cancel or delete initiated requests that have failed.

COBOL

This section contains the information that you need to incorporate the COBOL API into your Process Scheduler development.

COBOL Requests

All variables in copy member PTCUSTAT.CBL should be set (or left to default, if appropriate) by the application COBOL program before any call to PTPUSTAT. The only exception is PRUNSTATUS-RC, which is set by PTPUSTAT to reflect the success of your call. Set

CONTINUE-JOB-YES to TRUE if a process is part of a job definition and you want the next process request to run despite the run status set by the current request. Normally, subsequent job requests are only selected to run if the prior request completes with a status of Successful.



All Crystal and Workflow processes have internal APIs that do not require specific hooks from application modules. See the PeopleTools-based source member PTPEDIT.CBL for an example of how to interface COBOL-based members with the Process Scheduler API.

Process Scheduler Update COBOL API

Application programs written in COBOL can update selected process request fields at runtime using an API provided by PeopleSoft. This API includes the following fields.

COBOL Field Name	COBOL Picture	Description
PROCESS-INSTANCE	9(8) COMP	Key of the process request record to update.
RUN-STATUS	X(1)	7 = Processing, 9 = Successful, 10 = Unsuccessful.
RUN-STATUS-MSGSET	9(4) COMP	Message set number.
RUN-STATUS-MSGID	9(4) COMP	Message number.
RC	9(4) COMP	Application level return code.
MESSAGE-PARM1	X(30)	First message log parameter that can be used with the PeopleCode MsgGet and MsgText functions.
MESSAGE-PARM2	X(30)	Second parameter that can be used with the PeopleCode MsgGet and MsgText functions.
MESSAGE-PARM3	X(30)	Third parameter that can be used with the PeopleCode MsgGet and MsgText functions.
MESSAGE-PARM4	X(30)	Fourth parameter that can be used with the PeopleCode MsgGet and MsgText functions.
MESSAGE-PARM5	X(30)	Fifth parameter that can be used with the PeopleCode MsgGet and MsgText functions.
CONTINUE-JOB	9(4) COMP	1 = Continue Job, 0 = Terminate Job.

The name of the copy member that contains the COBOL API table description is PTCUSTAT.CBL. The API call to use is similar to this code to call PTPUSTAT subroutine:

```

IF  PROCESS-INSTANCE OF SQLRT  > ZERO

    IF  STATUS-OK OF SQLRT

        SET  RUN-STATUS-SUCCESSFUL OF PRUNSTATUS  TO  TRUE

    ELSE

        SET  RUN-STATUS-UNSUCCESSFUL OF PRUNSTATUS  TO  TRUE

    END-IF

IF  PROCESS-INSTANCE OF PRUNSTATUS  > ZERO

    CALL  'PTPUSTAT'  USING  SQLRT

                                PRUNSTATUS

    END-IF

    PERFORM  ZC000-COMMIT-WORK

END-IF

```

A Process Scheduler API aware COBOL program must update the run status of a request to “Processing” upon a successful connect. It must also update the run status to “Successful” or “Error” upon completion. If this process runs as part of a multi-process job, then the CONTINUE-JOB field can be set to 0 to prevent the next process from initiating or 1 to initiate the next job process, regardless of the status of this request. This way if one process fails, you don’t jeopardize the entire job. If you set CONTINUE-JOB to 1, you’ll want to make sure that none of the jobs necessarily rely on a previous job’s successful completion.

The test to see if a process is running as defined within a job is as follows:

```
IF JOB-INSTANCE OF SQLRT > 0
```

A value greater than zero means it is part of a multi-process job. It is critical that you do a COMMIT immediately following this call so that you are not holding locks.

All PeopleSoft COBOL application programs that use SQL should be defined in the Process Definition table with the following parameters:

```
DbType/%%DBNAME%%/%%OPRID%%/%%OPRPSWD%%/%%RUNCNTLID%%/%%INSTANCE%%
```



There is a forward slash (/) between each of the parameters above. The slash is easy to miss between the pairs of percent signs. Batch run control ID is the only data item that must be supplied by the application. There is a field named PROCESS—INSTANCE in the SQLRT data structure that contains the current process instance (key to the Process Request table).

Each API aware COBOL process must include copy member PTCUSTAT, and all variables used to initialize column data in the update to table PSPRCSRQST must be properly set before this update request.

SQR

This section contains the information that you need when incorporating the COBOL API into your Process Scheduler development.

SQR Requests

All variables defined in PRCSDEF.SQC should be set (or defaulted) by the application SQR program before calling Update-Process-Status (PRCSAPI.SQC). Set #prcs_continuejob to '1' if this process is part of a job definition and you want the next process request to run despite the run status set by the current request. Normally, subsequent job requests are only selected to run if the prior request completes with a status of "Successful".



All Crystal and Workflow processes have internal APIs that do not require specific hooks from application modules. For SQR-based members, see XRFWIN.SQR.

Each API aware SQR must include member PRCSDEF.SQC, and all PSPRCSRQST column-based variables must be properly set by application SQR code. Failure to manage these variables properly in the API can result in SQL update errors based on invalid data for definition type.

Process Scheduler SQR API

Application programs written in SQR can update selected process request fields at run-time using a PeopleSoft provided API. This is to be used for SQR reports. An include file named PRCSDEF.SQC contains a procedure named Define-Prcs-Vars to initialize the fields used in the API. Another include file named PRCSAPI.SQC contains a procedure called Get_Run_Control_Parms that retrieves the three parameters described below and updates the run status of the process request to "Processing," and another named Update-Prcs-Run-Status that performs only the process request table update.

SQRs should be defined to accept the following parameters from the command line.

<i>Parameter</i>	<i>Description</i>
Process Instance	Required so that the SQR knows which process request

	to update.
User ID	User ID key to the Run Control table.
Run Control ID	Run Control ID key to the Run Control table.

All SQRs use the procedure Get-Run-Control-Parms, defined in PRCSAPI.SQC. Here's an example:

```

Begin-Procedure Get-Run-Control-Parms

    input $prcs_process_instance 'Please press ENTER (Do not input a value)'

    if not isnull($prcs_process_instance)

        let #prcs_process_instance = to_number($prcs_process_instance)

        input $prcs_oprid 'Please press ENTER (Do not input a value)'

        let $prcs_oprid = upper($prcs_oprid)

        input $prcs_run_cntl_id 'Please press ENTER (Do not input a value)'

    else

        let #prcs_process_instance = 0

    end-if

    if #prcs_process_instance > 0

        let #prcs_run_status = #prcs_run_status_processing

        do Update-PrCs-Run-Status

        let #prcs_run_status = #prcs_run_status_successful

    end-if

end-procedure

```

The three input commands correspond to the three values in the command line:

```
%%INSTANCE%% %%OPRID%% %%RUNCNTLID%%
```

When you run the SQR through SQRW and do enter any input values, the SQR interprets this as having been run outside Process Scheduler, and it prompts for other input parameters that otherwise come from Run Control Tables.

A Process Scheduler API aware SQR program must update the run status of the request to "Processing" upon receiving control. It must also update the run status to either "Successful" or "Unsuccessful" upon completion.



All other SQR runtime parameters should reside in a run control record keyed by user ID and run control ID.

Scheduling Processes From Outside PeopleSoft

The `PROCESSREQUESTComponent` Interface provides an API to create or update a process request from outside PeopleSoft. It returns the Process Instance of the Process Request created.

To successfully develop the functionality to schedule a process or job to run from outside PeopleSoft requires expertise in Process Scheduler definitions, PeopleCode, and Component Interfaces.



For more information about PeopleCode and Component Interfaces see PeopleCode Developer's Guide and Component Interface Architecture.

Component Interface Details

The following topics provide the properties and methods associated with the Component Interface used to schedule processes from outside.

Component Interface Name

ProcessRequest

Properties

- RUNCONTROLID
- PROCESSTYPE
- PROCESSNAME
- JOBNAME
- RUNLOCATION
- RUNDATE
- RUNTIME
- RUNRECURRANCE
- OUTDESTTYPE
- OUTDESTFORMAT

- OUTDEST
- RUNSTATUS
- PROCESSINSTANCE
- REQUESTTYPE

Methods

- Standard
 - Cancel
 - Find
 - Get
 - Save
 - Update
 - Get
 - GetPropertyByName
 - SetPropertyByName
 - GetPropertyInfoByName
- User Defined
 - Create
 - Update

Example Component Interface in Visual Basic

The following example reveals a sample of how one might schedule a process from outside of PeopleSoft using Visual Basic.

Initializing the Component Interface

```
Dim oSession As New PeopleSoft_PeopleSoft.Session

Dim oBC As ProcessRequest

oSession.Connect(1, "TCHURY072198:7000", "PTDMO", "PTDMO", 0)

'get component from server

Set oBC = oSession.GetComponent("PROCESSREQUEST")

Status = oBC.Get()
```

Creating a Process Request:

- Properties

```
oBC.REQUESTTYPE = "Create"

oBC.RUNCONTROLID = "Test"

oBC.PROCESSTYPE = "SQR Report"

oBC.PROCESSNAME = "XRFWIN"

oBC.RUNLOCATION = "PSNT"

oBC.RUNDATE = "01/01/2000"

oBC.RUNTIME = "09:00:00"

oBC.OUTDESTTYPE = "FILE"

oBC.OUTDESTFORMAT = "SPF"

oBC.OUTDEST = "C:\temp\"
```

- Method

```
ProcessInstance = oBC.Create
```

Updating a Process Request

- Properties

```
oBC.REQUESTTYPE = "Update"

oBC.PROCESSINSTANCE = 10

oBC.RUNSTATUS = "2"
```

- Method

```
oBC.Update
```

PeopleCode ProcessRequest

The ProcessRequest class is the primary PeopleCode construct that you use for invoking processes through Process Scheduler using PeopleCode. The ProcessRequest PeopleCode maybe called from a push button, a Save page or field change event.

The ProcessRequest class provides properties and a method for scheduling a process or job that you have already defined using Process Scheduler Manager.

The properties of this class contain the same values as those that appear in Process Scheduler Manager for scheduling a process or job. Values you provide for these properties may override the equivalent values set in Process Scheduler Manager, depending on the override settings you make in Process Scheduler pages.

Developers of PeopleSoft applications can simplify certain tasks for users by scheduling processes using a PeopleCode. How you use the `ProcessRequest` construct depends on the nature of the task. For example, you may want to segregate processes into specific categories:

- Processes that you want to have initiated by an action—turning on a check box or clicking a push button—such as calculations.
- Reports associated with a particular function or set of tasks. You'll have a Print Push Button that may call this PeopleCode.

The `ProcessRequest` PeopleCode validates user input and writes a row to the Process Request table, telling the system all it needs to know to execute the process automatically, without user interaction. The Process Request table acts as the queue that the Process Scheduler Server Agent uses to determine what jobs need to be run and when.

You can schedule processes or *jobs* (groups of one or more processes) to run immediately or in the future. Recurring processes and jobs can be scheduled to run automatically at specific, user-defined intervals.

The `ProcessRequest` class is documented extensively in the PeopleCode PeopleBook.



For more information about the syntax of the Process Request class refer to PeopleCode Developer's Guide.

CHAPTER 4

Process Scheduler Administration

This section contains information in which Database Administrators, Workstation Administrators, and Application Server Administrators will be interested. After you read this section, you will be familiar with the function of the Process Scheduler Server Agent, how to use PSADMIN to configure and administer the Process Scheduler Server Agent, and various tuning and maintenance procedures that will help you to improve Process Scheduler performance.

We suggest that those who are responsible for administrative duties at your site also read the Process Scheduler End User section. By doing so, you will be better equipped to answer potential questions that your end users may have.

It's important to note that this section focuses on Process Scheduler administration in the Windows NT environment. For the most part, all of the topics discussed apply to all operating systems, but the examples apply to Windows NT. Although most of the topics are general, at the end of this section is a topic devoted to each operating system that PeopleSoft supports. The operating-system-specific section contains information that differs from the general discussion or supplements the general discussion to include details pertinent to your operating system.

The Workstation Environment

On Windows clients, Process Scheduler uses the values set in the Configuration Manager to find information it needs to run various types of batch requests properly. The Client Setup program that your Workstation Administrator runs during installation sets the appropriate information for the PeopleSoft environment. However, if you need to verify or make changes to your Process Scheduler variables (or any other PeopleSoft configuration information), use the PeopleSoft Configuration Manager, which is the PeopleSoft utility that maintains and sets PeopleSoft-specific registry settings.

During the installation of your PeopleSoft system, the Client Setup is usually run on each workstation that will run PeopleSoft applications. If your Workstation Administrator specified all of the appropriate environment variables contained in the Configuration Manager tabs, Client Setup properly configures your workstation for use with Process Scheduler and the various third-party programs, such as Microsoft Word, SQR, or Crystal Reports, that Process Scheduler calls upon to complete requests. If you're not sure that your workstation is properly configured to support Process Scheduler, verify that your environment is set up correctly by starting the PeopleSoft Configuration Manager and checking the settings within the appropriate tabs.



PeopleSoft does not recommend changing any of the settings in the Configuration Manager without consulting your Workstation Administrator first.

To view or edit PeopleSoft Configuration Manager settings:

1. From your PeopleSoft application, select Edit, Preferences, Configuration.

You can also start the Configuration Manager from the PeopleSoft program group on your desktop or from the Start, Programs menu.

2. When the Configuration Manager window appears, select the Process Scheduler tab (in the Profile interface).

From here, you can review and edit the settings that Process Scheduler uses to expand the defined variables and initiate your requests.



For more information about the Process Scheduler tab in Configuration Manager, see Process Scheduler.

3. Verify that all the settings reflect the correct values for your site.

The following table shows descriptions for the various parameters that you can set for Process Scheduler through the PeopleSoft Configuration Manager. The name in parentheses next to the parameter represents the corresponding name used to store these settings in the Windows registry.

Parameter	Description
PeopleSoft Home Directory (PS_HOME)	PeopleSoft home directory.
Crystal Reports (CRWRPTPATH)	Path to Crystal report files.
Output Directory (OUTPUT)	This is the directory to which the process or job output should be written.
Log Directory (LOG)	This is the directory to which any log files are written.
Temporary Directory (TEMP)	Temporary directory.
Database Drivers (DBBIN)	Path to database drivers.
Word Executables Directory (WINWORD)	Path to Microsoft Word executables.
Redirect Output	This option is designed primarily for troubleshooting client COBOL. If you select this check box, DISPLAY messages from COBOL, PSSQR, and PSAE are written to a log file and not to the screen. If you do not check this option, the messages are written to the screen, but not to the log file.

Parameter	Description
SQR Executables (SQRBIN)	Enter the path to SQRW.EXE.
SQR Flags (PSSQRFLAGS)	SQR flags required for launching SQR reports. -ZIF is used to set the full path and name of the SQR initialization file. PeopleSoft uses the file PSSQR.INI for initialization. This file contains settings and parameters that are used by SQR during the compile and execution phases.
SQR Report Search 1 (PSSQR1)	First SQR report file search path—usually set to a special directory on the local workstation.
SQR Report Search 2 (PSSQR2)	Second SQR report file search path—set to the PeopleSoft directory on the local workstation.
SQR Report Search 3 (PSSQR3)	Third SQR report file search path—set to a special directory on the file server.
SQR Report Search 4 (PSSQR4)	Fourth SQR report file search path—set to the PeopleSoft directory on the file server.
COBOL Executables (CBLBIN)	Path to COBOL executables.
Application Engine	Use these options either to run Application Engine program in debug mode or to disable restart functionality for a program run. Refer to your Application Engine documentation for details on these options.

Run Control IDs

Before you run a sample process, it's helpful to become familiar with the concept of run control IDs, because users are prompted either to add a new one or select an existing one. A run control ID is used as a key (with a user ID) for records that contain the parameters that a process needs at runtime. Storing the parameters in a table that the process can query using the run control ID and user ID enables the process to run without any user intervention.

Run control IDs are stored in a minimum of two tables, an application run control table and the Tools Run Control table (PSPRCSRQST). You can examine PS_PRCRUNCNTL table as a sample application run control table.

The PeopleTools Run Control table stores information required by Process Scheduler, such as output type, format, and destination. The Application Run Control table stores information required to run a process, such as from date, department ID, employee ID, and so on. All Application Run Control tables are keyed by user ID and run control ID.



Run control IDs are product-specific. Refer to your PeopleSoft product documentation for details on the run control IDs you will be using.

The Process Scheduler Server Agent

The Process Scheduler Server Agent is the component that resides on a server and runs as a process—that is, once it is initiated, it runs continuously in the background and requires no user interaction until it receives a request to shut down. The Process Scheduler Server Agent polls the Process Request table at a regular, user-defined interval to see if any process requests have been directed toward the server. If so, it starts the appropriate process, based on the requested run date and time.

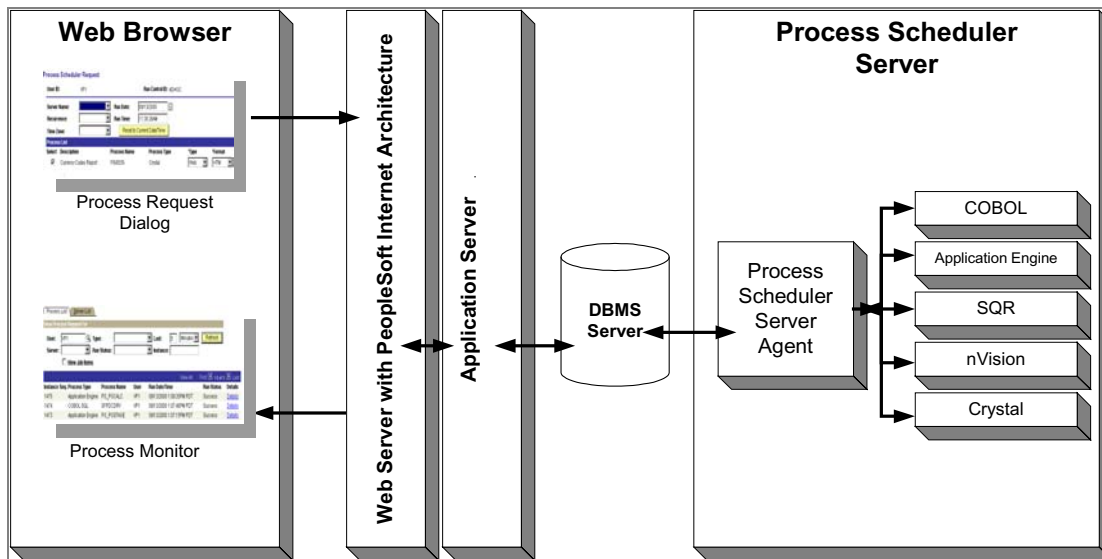
When the Process Scheduler Server Agent begins, it connects to the PeopleSoft database, initializes itself, then polls the Process Request table in search of queued requests to process. If it finds any, the Process Scheduler Server Agent gathers the data that defines the process, then starts it at the designated time.

The Process Scheduler Server Agent goes to sleep for a specified interval of time, so that it does not consume server resources. It continues this sleeping/polling process until the database administrator stops it manually.

During the polling cycle the Process Scheduler Server Agent also performs an Operating System level cancel of processes that have been canceled through the Process Monitor. Besides this, it also checks for processes of *Initiated* and *Processing* Run Status to see whether these processes are actually running. To do this, it uses the Process ID (PID) that is stored in the database when the process gets started. If the PID does not exist, the process is then set to *Error*.



The Process Scheduler Server Agent is *not* supported on Windows 9x.



Reporting Components of the PeopleSoft Internet Architecture

The previous example shows a high-level view of the processes involved with Process Scheduler and how they operate together. The following sections describe the events that take place within each area.

Using a Client for Process Requests

From the PeopleSoft workstation, a user can submit process requests by selecting File, Run from a particular PeopleSoft application, selecting a process from the list, and clicking OK in the Process Scheduler Request page. By doing so, a row is inserted in the PSPRCSRQST table (Process Request Table).

After a process request is submitted, you can monitor the status of the request using Process Monitor. For instance, with Process Monitor, you can see if a process request is currently processing or has completed; you can also check to make sure that the appropriate server is up and running.



For more information about the Process Scheduler Request Dialog page, see Using the Process Request Dialog page. For more information about using Process Monitor to check the status of a process, see Using Process Monitor.

Using a Server for Process Requests

On the server side, the Process Scheduler Server Agent polls the PSPRCSRQST table for incoming process requests. Upon finding an inserted row, or process request, the Process Scheduler Server Agent invokes the appropriate process. For example, if the requested process is an SQR report, the Process Scheduler Server Agent, at the specified date and time, launches PSSQR, which then calls SQRW.EXE to run the XRFWIN SQR Report. The Process Scheduler

Server Agent also updates the Run Status of that process instance to *Initiated* and the Session ID with the PID of that process.

Once the Process Scheduler Server Agent initiates a process, it is the responsibility of the started process—if it is API-Aware—to update the Run Status column in PSPRCSRQST accordingly. The Process Scheduler Server Agent, however, does monitor processes with Run Status of *Initiated* or *Processing* by checking the PID. If a process dies (PID does not exist) without updating the Run Status, the Process Scheduler Server Agent assumes there has been an error and updates the Run Status of that process to *Error*.

Using the PSADMIN Utility

You configure and administer your Windows NT and UNIX Process Scheduler Server Agent with the PSADMIN utility. PSADMIN is only supported on Windows NT and UNIX. However, in some cases, you can run the PSADMIN utility on operating systems that are not supported application servers.

Throughout the menus of the PSADMIN utility, the interface and options are exactly the same, whether you are using Windows NT or UNIX. However, in the case of the Process Scheduler menus within PSADMIN, the options are slightly different between the two operating systems. UNIX users have two extra options:

Show Status of a Process Scheduler Server

and

Kill a Process Scheduler Server

The following sections describe the menus and options within the PSADMIN utility related to the Process Scheduler in the order that they appear in the PeopleSoft Process Scheduler Administration menu—not in the order that you would access them the first time you configure your Process Scheduler Server. For example, the first menu item is this:

1) Start a Process Scheduler Server

However, logically, at some point previously, you would have already selected this:

4) Create a Process Scheduler Server Configuration

and

3) Configure a Process Scheduler Server.



You can also edit the configuration files manually, without the PSADMIN interface. To do this, select option 6) Edit Process Scheduler Configuration File.

Typically, after you have added and configured a Process Scheduler server, the majority of your administration tasks involves the first two menu options:

- 1) Start a Process Scheduler Server
- 2) Stop a Process Scheduler Server



For more information and step-by-step instructions for installing and configuring the Process Scheduler for the first time, see the *Installation and Administration* book for your RDBMS. The following documentation contains PSADMIN reference material related to Process Scheduler.

Starting PSADMIN

To start the PSADMIN utility, enter the following command in the Command Prompt:

```
cd <PS_HOME>\appserv
```

Then, invoke the PSADMIN utility by entering this:

```
psadmin
```

The following screen appears:

```
-----
PeopleSoft Server Administration
-----
```

- 1) Application Server
- 2) Process Scheduler
- 3) Web Components
- 4) Service Setup
- q) Quit

```
Command to execute (1-4, q): 2
```

Enter 2 to invoke the PeopleSoft Process Scheduler menu.

To access the PeopleSoft Process Scheduler Administration menu:

4. Select option 2 from the PeopleSoft Server Administration menu.

```
-----
```

PeopleSoft Server Administration

- 1) Application Server
- 2) Process Scheduler
- 3) Web Components
- 4) Service Setup
- q) Quit

Command to execute (1-4, q): 2

- 5. Select the option from the PeopleSoft Process Scheduler Administration menu that corresponds to the action you need to perform.**

PeopleSoft Process Scheduler Administration

- 1) Start a Process Scheduler Server
- 2) Stop a Process Scheduler Server
- 3) Configure a Process Scheduler Server
- 4) Create a Process Scheduler Server Configuration
- 5) Delete a Process Scheduler Server Configuration
- 6) Edit a Process Scheduler Configuration File
- 7) Show Status of a Process Scheduler Server
- q) Quit

Command to execute (1-6, q) :

The following sections explain the options that you will use most often for Process Scheduler within PSADMIN.



For more information about other options, see the Process Scheduler Installation and Administration guide for your operating system.

Starting a Process Scheduler Server

This describes the process for starting a Process Scheduler Server on the application server. For information on alternate methods of starting the Process Scheduler Server, see Process Scheduler or your Installation and Administration guide.

To start a Process Scheduler Server:

6. Select option 1 from the PeopleSoft Process Scheduler Administration menu.
7. To start the Process Scheduler server for a specific database, type in the number in the Database list: that corresponds to the appropriate database.

Database list:

1) ps800dmo

Select item number to start: 1

Starting Process Scheduler Using Tuxedo

With PeopleTools 8.12, you have the option to have Process Scheduler started by Tuxedo. This option will be based on what you specify in the Process Scheduler Configuration file at the Maintained by Tuxedo prompt. One main benefit of having Tuxedo started is that it can monitor both the Process Scheduler Server Agent program (PSPRCSRV) and the Distribution Agent program (PSDSTSRV). If Tuxedo detects one of them had abruptly terminated, it will attempt to restart that program. This will reduce the administrative task of constantly monitoring of any Process Scheduler that had shutdown.



For more information about configuring Tuxedo to start the Process Scheduler Server, please refer to the Install and Administration guide for additional information

Stopping a Process Scheduler Server

This process describes the steps you need to complete in order to stop a Process Scheduler Server running on an application server using PSADMIN. If you need information on alternate methods for stopping a Process Scheduler Server refer to Process Scheduler or your *Installation and Administration* guide.

To stop a Process Scheduler Server:

8. Select option 2 from the PeopleSoft Process Scheduler Administration menu.
9. If you want to stop the Process Scheduler server for a specific database, enter the number from the Database list: that corresponds to the appropriate database.

Database list:

1) ps800dmo

Select item number to stop: 1

On Windows NT you will see a DOS window momentarily appear on your screen. Soon after (15-20 seconds), your Process Scheduler Server will stop, and its output window will disappear from your Windows NT Task Bar.

The reason the server does not stop automatically lies in the fact that PSADMIN is designed to perform a graceful stop. Rather than immediately killing the server, the server refreshes, processes the request to stop, and terminates. Depending upon your server sleep time, you might have to wait a few seconds. The default sleep time is 15 seconds.

You can verify the status with Process Monitor.

Configuring a Process Scheduler Server

Configuring a Process Scheduler server is similar to configuring application servers and web servers. From the PeopleSoft Process Scheduler Administration menu, you invoke a text-driven interface that prompts you for parameter values. All of the Process Scheduler server configuration information for a specific database is contained in the PSPRCS.CFG configuration file, and the PSADMIN provides an interface for and prompts you to edit the PSPRCS.CFG file.



The PSPRCS.CFG file supports environment variables. For example, the TEMP setting in the [Process Scheduler] section can look like this: TEMP=%TEMP%.

Although you edit PSPRCS.CFG through PSADMIN, on Windows NT you can find the PSPRCS.CFG file in the following directory:

```
<PS_HOME>\APPSERV\PRCS\<dbname>
```

To configure a Process Scheduler Server:

10. Select option 3 from the PeopleSoft Process Scheduler Administration menu.
11. From the Database list: select the number that corresponds to the server that you want to configure.

Database list:

```
1) ps800db
```

Select item number to configure: 1

12. Specify the appropriate values for your site in the following configuration section prompts.

The following sections describe each configuration section for Process Scheduler and the options they offer.

Startup (Process Scheduler)

The first section that you encounter when using the PSADMIN utility to configure a Process Scheduler Server Agent is the Startup section, as shown in the following example. This section describes each parameter contained in the Startup section.

Values for config section - Startup

DBName=

DBType=

OprId=

OprPswd=

ConnectId=

ConnectPswd=

ServerName=

Do you want to change any values (y/n)? [n]:

Each value in the Startup section is described in the following list.

DBName

Specify the database name associated with a particular Process Scheduler Server Agent, such as PTDMO, HRDMO, FSDMO, SADMO, and so on.

DBType

Specify the database type, such as DB2, DB2400, DB2ODBC, DB2UNIX, INFORMIX, MICROSOFT, ORACLE, and SYBASE.

OprId

Enter the user ID, such as PTDMO.

OprPswd

Enter the password associated with the user ID, such as PTDMO.

ConnectId

Enter the Connect ID.

ConnectPswd

Enter the ConnectPswd.

ServerName

Database server name. Required for Informix and Sybase.

Database Options

The Database Options section only applies to Sybase and Oracle.

```
Values for config section - Database Options
```

```
SybasePacketSize=512
```

```
UseLocalOracleDB=0
```

```
Do you want to change any values (y/n)? [n]:
```



For more information, see the equivalent parameters that appear when configuring an application server domain, Database Options.

Trace (Process Scheduler)

The Trace section enables you to set your Trace values for performance monitoring and troubleshooting purposes.

Values for config section - Trace

TraceFile=%PS_SERVDIR%\logs\PeopleTools.trc

TraceSQL=0

TracePC=0

TraceAE=0

Do you want to change any values (y/n)? [n]:

TraceFile

For Windows only. The file to which SQL traces are written to the TraceSQL has a value greater than zero. SQL traces for the following programs are written to this file: Crystal, nVision, Cube Manager. Other processes—such as Application Engine, SQR and COBOL—will have the SQL traces written to a separate subdirectory under the Log/Output Directory.

TraceSQL

Specify a SQL trace value for troubleshooting. It is implemented as a Bit field.

TracePC

Specify a PeopleCode trace value for troubleshooting. Used by Application Engine when it runs PeopleCode.

Trace AE

Specify the trace options specific to Application Engine. Trance information based on this option is written to a file with the following format: <Application Engine program name>_<Process Instance>.AET

Process Scheduler

After you've set your Trace values, the Process Scheduler section enables you to set all of the environment variables associated with Process Scheduler. This section is similar to the values that appear on the Process Scheduler tab in Configuration Manager.



Note. The default values for PS_HOME here and in future sections assume that you have set up SQR, Crystal, and nVision locally on your batch server. It's fine to point to those items on your file server, but if so you need to use a full path. You cannot use a PS_HOME environment variable, because PSADMIN now employs the PS_HOME environment variable to point to a local directory on the batch server.

Values for config section - Process Scheduler

Values for config section - Process Scheduler

ProgramName=psprcsrv

PrcsServerName=PSNT

DBBIN=

Max Reconnect Attempt=12

Reconnection Interval=300

Log/Output Directory=%PS_SERVDIR%\log_output

LogFence=5

CBLBIN=%PS_HOME%\CBLBIN

CRWRPTPATH=%PS_HOME%\CRW

TEMP=%TEMP%

TOOLBIN=%PS_HOME%\BIN\CLIENT\WINX86

TOOLBINSRV=%PS_HOME%\BIN\SERVER\WINX86

WINWORD=C:\APPS\OFFICE97\OFFICE\WINWORD.EXE

DEFAULTPRINTER=

Do you want to change any values (y/n)? [n]:

Each parameter in the Process Scheduler section is described in the following list.

ProgramName

If you wish to rename PSPRCSRV, enter the new name.

PrsServerName

Process Server Name—this needs to match the name defined in the database, such as PSNT.

DBBIN

Enter the path to the database drivers—that is, your connectivity software.

Max Reconnect Attempt

Max number of attempt to try reconnect to the database when the connection is lost.

Reconnection Interval

Interval in seconds between attempts to reconnect

CBLBIN

Specify the path to COBOL executables, such as %PS_HOME%\CBLBIN.

CRWRPTPATH

Specify the path to your Crystal Report files, such as %PS_HOME%\CRW.

TEMP

Specify the local temporary directory, such %TEMP%.

TOOLBIN

Enter the location of the PeopleSoft PeopleTools executables, such as %PS_HOME%\bin\client\winx86.

TOOLBINSRV

Enter the location of the PeopleSoft PeopleTools executables residing in the SERVER directory, such as %PS_HOME%\bin\server\winx86.

WINWORD

Specify the path to your Microsoft Word executables, such as c:\apps\office95\winword. Note that these need to be on your batch server environment.

DEFAULTPRINTER

Specify the UNC path of the printer where reports will be printed when the %DefaultPrinter% was specified as the output destination.

Log/Output Directory

Directory where files generated by the program will be written. When Process Scheduler initiates a process request, it will create a subdirectory in the format <Process Type ID>_<Program Name>_<Process Instance> that contains all the generated files. For instance, the SQR program will have all the reports, trace and log files in the subdirectory: SQR_XRFWIN_20 . Also

optional directory used with Output Destination field when scheduling a request. This variable (%%OutputDirectory%%) can be used in the File/Printer field of the Process Scheduler Request dialog. Note that the OutputDirectory has an extra slash attached at the end.

LogFence

Enter the desired Process Scheduler tracing levels, such as 5.



For more information about this setting, see Logging Levels.

Log Directory

Directory where SQR, COBOL, and Process Scheduler log files are written, such as %PS_SERVDIR%\logs.

Tuxedo Settings

Values for config section - Tuxedo Settings

Maintained by Tuxedo=Y

Restartable=Y

Grace Period=600

Max Restart Attempt=5

Add to PATH=%WINDIR%;%WINDIR%\SYSTEM32

Do you want to change any values (y/n)? [n]:

The following table describes each parameter in the PSTOOLS section:

Maintained by Tuxedo

Flag indicating how Process Scheduler Server Agent and Distribution Agent will be booted. If the flag is set to 'Y', these programs will be started and monitored by Tuxedo

Restartable

A 'Y' or 'N' flag instructing Tuxedo to restart a Process Scheduler Server Agent or Distribution Agent if it abruptly terminated.

Grace Period

Grace period between restart in seconds

Max Restart Attempt

Max number of restarts in the grace period

Add to PATH

Optional. Additional directory th

Interface Driver

Values for config section - Interface Driver

```
SCP_LOCALE="LOCALE=EN_US", "CHARSET=US-ASCII"
```

Do you want to change any values (y/n)? [n]:

The following table describes each parameter in the Interface Driver section:

SCP_LOCALE

Defines the "RPS_LOCALE" string which is sent to the SCP (Supply Chain Planning) server used by Business Interlink.

PSTOOLS

Values for config section - PSTOOLS

```
JavaVM Shared Library=
```

```
Add to CLASSPATH=
```

```
DbFlags=0
```

```
Verity Dir=
```

```
Suppress App Error Box=N
```

```
Process exit grace period=5
```

Do you want to change any values (y/n)? [n]:

The following table describes each parameter in the PSTOOLS section:

JavaVM Shared Library

Set JavaVM Shared Library to indicate which JVM library to use. For Sun's Java 2 (JDK 1.2) on WinNT point to the location of the jvm.dll file such as C:\Program Files\JavaSoft\JRE\1.2\bin\classic\jv. Do not include a file name extension.

Add to CLASSPATH

The CLASSPATH environment variable tells the Java Virtual Machine and other Java applications where to find the java class libraries, including any user-defined class libraries. Since PeopleTools will automatically generate CLASSPATH entries for core PeopleSoft delivered class libraries, use this field to specify any custom or additional class libraries that need to be accessible by PeopleSoft.

DbFlags

Enter 1 or 0 to indicate the command to update table statistics to the database. Programs like Application Engine and COBOL use the metaSQL %UpdateStats to run the command to run statistics to a specific table. This command will be issued to the database if the value of this flag is set to 0.

Verity Dir

This is the directory where the Verity tool set is installed. This directory should contain _<platform>\bin\mkvdk, e.g.

```
%PSVERITYDIR%\_nti40\bin\mkvdk
```

Suppress App Error Box

A flag that suppresses the console's Application Error dialog box after an application error occurs. A setting of 'Y' will suppress the dialog box.

Process exit grace period

When an application engine job completes, it will be given the specified number of seconds to exit. If the process has not exited when the grace period expires, it will be terminated via a "psreaper" process. A grace period of 0 will disable the reaper.

Report Distribution

Values for config section - Report Distribution

```
Report Template=%PS_HOME%\APPSERV\PRCS\WEB\rpt_index.html
```

Do you want to change any values (y/n)? [n]:

The following table describes each parameter in the Report Distribution section:

Report Template

The template HTML file used to generate the INDEX.HTML for a process request. The INDEX.HTML will contain the list of all files generated by the process request that will be transferred to the Report Repository.

SQR

Values for config section - SQR

```
SQRBIN=

PSSQRFLAGS=-ZIF%PS_HOME%\SQR\PSSQR.INI

Print Log=N

PSSQR1=%PS_HOME%\SQR

PSSQR2=

PSSQR3=

PSSQR4=
```

Do you want to change any values (y/n)? [n]:

The following table describes each parameter in the SQR section:

SQRBIN

Enter the path to the SQRW executables.

PSSQRFLAGS

Specify the SQR report arguments required for launching SQR.



Do not set the -o flag on the Windows NT server in the SQR Flags section.

Print Log

Enter either Y or N to indicate whether you want SQR logs printed out when an SQR report is routed to the printer.

Enter the first SQR report file search path.

PSSQR1

Enter the first SQR report file search path.

PSSQR2

Enter the second SQR report file search path.

PSSQR3

Enter the third SQR report file search path.

PSSQR4

Enter the fourth SQR report file search path.

PSSQRFLAGS

Specify the SQR report arguments required for launching SQR.

RemoteCall

Values for config section - RemoteCall

RCCBL Timeout=300

RCCBL Redirect=0

Do you want to change any values (y/n)? [n]:

The following table describes each parameter in the RemoteCall section:

RCCBL Timeout

Maximum allotted time (in seconds) to run Remote Call with Application Engine

RCCBL Redirect

If this parameter is off (set to 0), log files generated from Remote Call are not retained. If this parameter is on (set to 1), log files are redirected to the Log/Output directory.

nVision

If you plan to have Process Scheduler invoke nVision jobs, you need to specify the appropriate parameters in the nVision section.

Values for config section - nVision

DrillDownDir=%PS_HOME%\NVISION\LAYOUT\DRILLDN

ExcelDir=

InstanceDir=%PS_HOME%\NVISION\INSTANCE


```
LayoutDir=%PS_HOME%\NVISION\LAYOUT  
  
MacroDir=%PS_HOME%\EXCEL  
  
StyleDir=REG_SZ=%PS_HOME%\PS\EXCEL\STYLESHEETS  
  
TemplateDir=%PS_HOME%\EXCEL
```

Do you want to change any values (y/n)? [n]:

Each of the nVision parameters is described in the following list.

DrillDownDir

Specifies the location of your PeopleSoft nVision DrillDown files, such as %PS_HOME%\NVISION\LAYOUT\DRILLDN.

ExcelDir

Please leave this parameter blank.

InstanceDir

Enter the location where nVision places report instances, such as %PS_HOME%\NVISION\INSTANCE.

LayoutDir

Specifies the location of your PeopleSoft nVision layout, such as %PS_HOME%\NVISION\LAYOUT.

MacroDir

Enter the directory containing macros for PeopleSoft nVision and Query Link, such as %PS_HOME%\EXCEL.

StyleDir

Enter the path to your nPlosion style files.

TemplateDir

Enter the location of the QUERY.XLT file, which defines the Excel styles for formatting your output. The default is the MacroDir, such as %PS_HOME%\EXCEL.

Crystal

If you plan to have Process Scheduler invoke Crystal jobs, you need to specify the appropriate parameters in the Crystal section.

Values for config section - Crystal

```
Trace=NO
```

```
TraceFile=%TEMP%\CRYSTAL.TRC
```

Do you want to change any values (y/n)? [n]:

Each value in the Crystal section is described in the following list.

Trace

Enter either YES or NO to indicate whether you want tracing enabled or not.

TraceFile

Enter the name of the trace file, such as %TEMP%\CRYSTAL.TRC.

Mail Server

If you intend to implement PeopleSoft Workflow and use Process Scheduler to generate electronic mail messages, you will need to specify the appropriate values in the Mail Server section.

Values for config section - Mail Server

```
MailDLLPath=
```

```
ServerKey=1
```

Do you want to change any values (y/n)? [n]:

MailDLLPath

Enter the location of the mail DLL your site uses. If you use a MAPI system, enter the location of the MAPI32.DLL; and if you use a VIM system, enter the location of VIM32.DLL. For example: C:\WINDOWS\SYSTEM.

ServerKey

This is a flag to specify your mail protocol. For VIM value=1, and for MAPI (value = 0).



For more information about PeopleSoft Workflow, see Adding Events and Routings.

Lotus Notes

If you also plan to incorporate electronic forms routing using PeopleSoft Workflow and Process Scheduler, you need to specify the following parameters in the PSFORMS\Lotus Notes section

Values for config section - PSFORMS\Lotus Notes

DetachDir=%TEMP%

NextAvailableNumber=1

MsgAgtFrq=30

FormsDB=

FormsServer=

MsgAgtDB=

MsgAgtServer=

Do you want to change any values (y/n)? [n]:

The following list describes each parameter that appears in the PSFORMS\Lotus Notes section.

DetachDir

This is where you specify the directory into which PSNOTES.EXE detaches any file attachments on the forms it receives. This is also where PSNOTES.EXE places any files that it does not deliver to the Message Agent.

NextAvailableNumber

An increment set by PSNOTES that is designed to track detached files. This value should not be manipulated.

MsgAgtFrq

This parameter controls the polling frequency. Here you can specify how often, in seconds, the Message Agent Monitor program checks the mail-in database for new forms to process. The default is 30 seconds.

FormsDB

Specify the database on the FormsServer in which the forms reside.

FormsServer

Specify the name of the Lotus Notes server where the forms are defined.

MsgAgtDB

Specify the name of the Lotus Notes mail-in database you want PSNOTES.EXE to check. This is the database to which users send forms to be processed by PeopleSoft applications.

MsgAgtServer

Specify the name of the Lotus Notes server where the mail-in database resides.



For more information about PeopleSoft Workflow, see PeopleSoft Workflow.

SMTP Settings

To specify the appropriate SMTPServer and port to receive the email requests you need to edit the SMTP Settings section, as shown below.

Values for config section - SMTP Settings

SMTPServer=

SMTPPort=25

SMTPServer1=

SMTPPort1=0

SMTPSender=

SMTPSourceMachine=

SMTPCharacterSet=

SMTPEncodingDLL=

Do you want to change any values (y/n)? [n]:

The following topics describe each of the parameters within the SMTP configuration section.

SMTPServer

Enter the name of the corporate mail gateway server machine.

SMTPPort

Enter the port number on the mail server machine.

SMTPServer1

Failover corporate mail server gateway machine.

SMTPPort1

Enter the port number on the failover mail server machine.

SMTPSender

Enter the sender's Internet address. This must be a valid address, such as user1@xyzcorp.com.

SMTPSourceMachine

Enter the sender's source machine name and Internet address in the form of MACHINE.XYZCORP.COM. This value is required in some but not all environments.

SMTPCharacter Set

Here, specify the character set used on the sender's machine.

SMTPEncodingDLL

Specifies the name of a DLL used to translate the mail message to non-Unicode character set. By default, all outgoing SMTP mail is sent in Unicode UTF-8.

Cache Settings

```
Values for config section - Cache Settings
```

```
CacheBaseDir=%PS_SERVDIR%\CACHE
```

```
EnableServerCaching=1
```

```
ServerCacheMode=0
```

```
Do you want to change any values (y/n)? [n]:
```

The following topics describe each of the parameters within the Cache Settings configuration section.

CacheBaseDir

Specify the settings for your cache directory.

EnableServerCaching

Instructs how file caching will be setup.

- 0 Server File caching disabled
- 1 Server File caching limited to most used classes
- 2 Server File caching for all types

ServerCacheMode=

Set ServerCacheMode=0 for one cache directory per process, 1 for shared cache.

Setting Up Process Scheduler for Report Distribution

To be able to transfer reports and logs to the Report Repository, you must first have the PeopleSoft Internet Architecture installed. After that, you must set up the Distribution Agent to be started by Process Scheduler Server Agent, which is defined in the Server Definition page in Process Scheduler Manager. You must also complete the setup of the Report Repository as described in the Installation and Administration guide, “*Setting Up the PeopleSoft Internet Architecture.*”



For complete instructions about the set up that you need to complete to transfer reports, see Setting Up Report Distribution.

Creating a Process Scheduler Server Configuration

This section describes the steps you need to complete in order to add a Process Scheduler server configuration on your application server. You must add or create a Process Scheduler before you can configure it.

To create a Process Scheduler server (configuration):

13. Select option 4 from the PeopleSoft Process Scheduler Administration menu.

```
-----  
PeopleSoft Process Scheduler Administration  
-----  
  
1) Start a Process Scheduler Server  
2) Stop a Process Scheduler Server  
3) Configure a Process Scheduler Server  
4) Create a Process Scheduler Server Configuration  
5) Delete a Process Scheduler Server Configuration  
6) Edit a Process Scheduler Configuration File  
7) Show Status of a Process Scheduler Server  
q) Quit
```

Command to execute (1-6, q) :

14. Enter the name of the database that the Process Scheduler server will access.

Please enter name of Database that server will access :ps800db

15. Select the appropriate configuration template for the operating system on which your process server runs.

You will only see the appropriate template for your operating system.

Process Scheduler Configuration templates:

1) nt

Select config template number: 1

You should see text on the screen similar to what appears in the following example:

Creating Process Scheduler Server for Database ps800db...

Copying Process Scheduler Server configuration file(s)...

Process Scheduler Server configuration created.

When the add server process completes, you should see the PeopleSoft Process Scheduler Administration menu on the screen.

Deleting a Process Scheduler Server

If you need to delete a Process Scheduler configuration from, you can do so using PSADMIN.

To delete a Process Scheduler server (configuration):

16. Select option 5 from the PeopleSoft Process Scheduler Administration menu.

```
-----
PeopleSoft Process Scheduler Administration
-----
```

1) Start a Process Scheduler Server

2) Stop a Process Scheduler Server

- 3) Configure a Process Scheduler Server
- 4) Create a Process Scheduler Server Configuration
- 5) Delete a Process Scheduler Server Configuration
- 6) Edit a Process Scheduler Configuration File
- 7) Show Status of a Process Scheduler Server
- q) Quit

Command to execute (1-6, q) :

- 17.** Select the number in the Database list: that corresponds to the database to which your server has access.

Database list:

- 1) ps800db

Select item number to delete: 1

- 18.** PSADMIN prompts you to continue; if you want to delete the server, enter y.

Do you want to continue? (y/n) [n] :y

You should see the following text on the screen.

Attempting to delete directory...

Directory successfully deleted.

Editing Process Scheduler Configuration File

You can edit the Process Scheduler Server configuration file manually instead of using the prompts in the PSADMIN interface. By default, Notepad is used as the editor. You can use a different editor by setting the EDITOR environment variable. For example:

```
set EDITOR=viw
```



When editing PSPRCS.CFG, make sure that there are no spaces between the equals sign and the entries. Also, make sure that there are no trailing spaces.

To manually edit the pspres.cfg:

19. Select option 6) Edit a Process Scheduler Configuration File from the PeopleSoft Process Scheduler Administration menu.

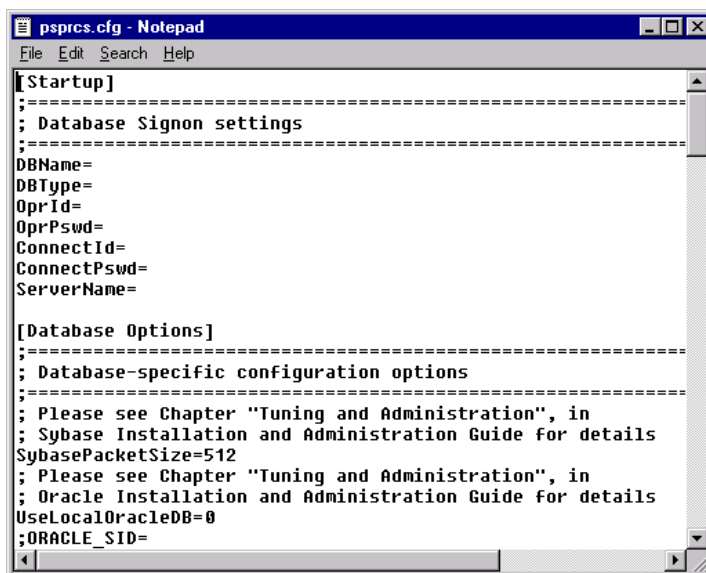
20. Select the database associated with the file you want to edit.

Database list:

- 1) ptdmoges
- 2) ptdmo80
- 3) ptdmotst

Select item number to configure:

21. Enter the variables for the parameters you need to specify.



Manually Editing PSPRCS.CFG Through an Editor

Process Scheduler Command Line Options

You can bypass the PSADMIN menus to start and stop your Process Scheduler server.

Start the Process Scheduler

To start your process scheduler server from the command line, enter the following:

```
psadmin -p start -d <dbname>
```

Stopping the Process Scheduler

To stop your process scheduler server from the command line, enter the following:

```
psadmin -p stop -d <dbname>
```

Log and Output Directory

The Log/Output Directory feature is a setting that you specify in the configuration file to enable you to set a common log and output directory. By default it is set to the following:

```
Log/Output Directory=%PS_SERVDIR%\log_output
```

For each process request, a subdirectory is created in the Log/Output directory. The naming convention used for the subdirectory is as follows:

```
<Process ID>_<Program Name>_<Process Instance>
```

The process ID assigned is based on the process request's process type:

Process Type	Process ID
COBOL	CBL
Application Engine	AE
SQR	SQR
NVision	NVS
Crystal	CRW
Database Agent	DBA
Cube Manager	CUBE
WinWord	WRD
Other	OTH

To illustrate this feature further, let's examine a typical scenario. In doing so, assume the following setup:

- In psprcs.cfg Log/Output Directory=%PS_SERVDIR%\log_output
- PS_SERVDIR=c:\pt800\appserv\prcs\ptdmo (where the *c:* represents the drive on the Process Scheduler server and *not* the client workstation)
- A user runs the SQR report: XRFWIN.SQR
- Process instance is 23

With all of these items in place, then the output will be written to the following location:

```
c:\pt800\appserv\prcs\ptdmo\log_output\SQR_XRFWIN_23\xrfwin_23.lis
```

For majority of cases, the log files and reports will be written to the subdirectory in the Log/Output Directory. The only time a report and log files are not written to this directory when one of the following conditions occurs:

- A user has specified a specific directory from the Process Request Dialog page. This option is available only for the Output Destination Type of file.
- The Process Definition is set for a process to restrict the Output Destination Type of File and a specific directory is specified other than the meta-string *%%OutputDirectory%%*.
- A Process Profile assigned for the user who submitted the request indicates an Output Directory anything other than *%%OutputDirectory%%*.
- A program hardcodes the directory to where the log and/or report should be written.



Keep in mind that the C: that appears in the previous example represents the C: drive on the server.

If you wish to control this location and not have your users send the output to any other location, you can do so in the Process Profile for a class in Security Administrator by doing the following:

- In the Server Destinations group specify a file and printer destination.
- Disable the Override Output Destination parameter in the allow requester to group.

Updating Process Scheduler System Defaults

Process Scheduler maintains a single-row table that stores system-wide parameters and system defaults related to all processes. If needed, you can modify the values stored in this table using the following procedure.

To update Process Scheduler System Defaults:

22. Open the Process System page by selecting PeopleTools, Process Scheduler Manager, Use, System Settings.

System Settings

Default Settings

Last Process Instance:

Last Report ID:

Retention Days:

Operating System:

Purge Options

Next Purge Date:

Next Purge Time:

Recurrence:

Save

Process System page

23. In Last Process Instance, enter a starting number—typically the number of your last background process run—to serve as a point of reference for subsequent runs.

Process Scheduler assigns the next run a process instance number one greater than the value entered here, and automatically increments the Last Process Instance for all subsequent requests. This value is typically entered only once, if desired, to establish an initial starting value other than one.



To avoid requests with duplicate instance numbers, the system does not allow you to decrease the Last Process Instance value. If you attempt to decrease the value, you receive the following error message: “Incorrect Process Instance (105,38).” However, you can increase the value if needed. It is highly unlikely to ever reach the maximum process instance value in a normal production environment.

24. Select a default operating system.

The default operating system is used to establish a default value for the operating system platform on which this database is installed. This value is used when you wish to run a process on the server and the server name is set to *(any)* in the Server drop-down list in the **Run Location** group in the Process Scheduler Request page.

25. Save your changes.

Setting Up Process Scheduler Security

The instructions below details the procedures needed to setup a user ID with proper access and privileges in Process Scheduler. A user ID who will be submitting process request need to be setup with a Process Profile which defines the user’s privileges in Process Scheduler. For instance, a user can be prohibited from submitting process request from a workstation or limit what the user can view in the Process Monitor page. In order to setup the user’s access in Process

Scheduler, a Process Profile needs to be defined setting the proper authorizations and default settings. The user profile needs to be updated to assign the Process Profile.



For more information about granting security for Process Scheduler, see Understanding PeopleSoft Security.

To Update Process Profile:

26. Open the desired operator class definition in **Maintain Security, Use, Permission List**.
27. Select the **Process** tab.
28. Select the Process Profile Permissions link
29. Under **Workstation Destinations** and **Server Destinations**, enter a default file and printer destination for the client and server.

Here's a list of sample values for Server Destination - File:

OS	Sample Server Destination Value
Windows NT	%%OutputDirectory%%
UNIX	%%OutputDirectory%%
OS/390	HLQ.PSVV

Process Profile Permission

Permission List: ALLPANLS

Description:

<p>Workstation Destinations</p> <p>File: %%OutputDirectory%%</p> <p>Printer: %DefaultPrinter%</p>	<p>Allow Process Request</p> <p>View By: All</p> <p>Update By: Owner</p>
<p>Server Destinations</p> <p>File: %%OutputDirectory%%</p> <p>Printer:</p>	<p>Allow Requestor To</p> <p><input checked="" type="checkbox"/> Override Output Destination</p> <p><input checked="" type="checkbox"/> Override Server Parameters</p> <p><input checked="" type="checkbox"/> View Server Status</p> <p><input checked="" type="checkbox"/> Update Server Status</p> <p><input checked="" type="checkbox"/> Enable Recurrence Selection</p> <p><input checked="" type="checkbox"/> Run Client Process</p>
<p>OS/390 Job Controls</p> <p>Name:</p> <p>Acct:</p>	

OK Cancel

Process Profile Permission page

30. Select the appropriate **Allow Process Request** options.

This section enables you to adjust the level of access rights all other operators have for viewing and updating process requests initiated by the operator(s) under a particular profile. Both view and update can be changed to **Owner**, **All**, or **None**. The default is set to enable

the process request to be viewed by **All** and updated only by **Owner**. If you select to view by **Owner**, no one else can view the status of the process in Process Monitor. Make any necessary adjustments to the operator rights.

- **Override Output Destination:** You can allow the operator to override the output destination from the Process Scheduler Request dialog. If this option is turned off, the **File/Printer** field on the Process Scheduler Request dialog will be disabled and the operator will not be able to modify it. This setting can be used to restrict users to redirecting their output to the default destinations only.
- **Override Server Parameters:** Allows the user to override the server name and run date/time.
- **View Server Status:** Allows a user to access the server's view in the Process Monitor.
- **Update Server Status:** Allows a user to suspend, restart, or bring down a server if needed through the Process Monitor. Also allows a user to refresh the Process Monitor – Server List screen with the Refresh button.
- **Enable Recurrence Selection:** Allows a user to select a Run Recurrence definition on the Process Scheduler Request dialog. If this selection is turned off, the user cannot select a process to recur.
- **Run Client Processes:** Allows a user to run processes on the client. If this option is turned off, the client button on the Process Scheduler Request dialog box will be disabled.

31. Save your changes.

To Assign a Process Profile to a User ID

32. Open the profile for a user ID by selecting PeopleTools, Maintain Security, Use, User Profiles.
33. Select a user ID. (For example, use PS)
34. Select the **General** tab.
35. Enter the desired **Process Profile** for this user ID

General | ID | Roles | Workflow | Audit | Administrator | Links

User ID: 8001

Description: Schumacher, Simon

☐ Account Locked Out?

Logon Information

Symbolic Id:

Password:

Confirm Password:

General Attributes

Email ID:

Language Code: ☐ Multi Language Enabled?

Currency Code:

Permission Lists

Navigator Homepage: [Explain](#) Primary: [Explain](#)

Process Profile: [Explain](#) Row Security: [Explain](#)

[Save](#) [Return to Search](#) [Next in List](#) [Previous in List](#) [Add](#) [Update/Display](#)

General page

36. Save your changes.

Alternately, you have an option to setup a User ID in PeopleSoft Security as a Process Scheduler system administrator. A user with this privilege has ability to update any definitions in Process Scheduler Manager and view all process requests in Process Monitor.

To Assign a Process Scheduler System Administrator Role to a User ID:

37. Open the profile for a user ID by selecting PeopleTools, **Maintan Security, Use, Roles**.

38. Select the role name of **ProcessSchedulerAdmin** from the list.

39. Save your changes

Links

Role Name: ProcessSchedulerAdmin

Description: Process Scheduler Admin

Role Status

☐ Role Disabled

Long Description

This is for roleusers who are Process Scheduler Administrators.

Roles page

Advanced Tuning

The following information is useful information for administrators while they monitor the performance of the batch server and batch processes.

Process Scheduler Server Logging System

The following sections describe the Process Scheduler logging system.

Log Directory

This directory is used to store the Process Scheduler Server Agent logs. These are files that a user will not normally need to review, unless there is a problem with running a process or there is some reason to verify that the operation of a process was as expected. The log directory for the Process Scheduler Server Agent is:

<Log Directory>_PSPRCRVLOG\

The **<Log Directory>** corresponds to the directory specified in the **Log/Output Directory** variable in the Process Scheduler Configuration file (psprcs.cfg).

Log Files

This section describes the two log files pertaining to the Process Scheduler Server Agent.

Process Scheduler Server Agent log

The Process Scheduler Server Agent log is sent to the file with the format:

<Log Directory>_PSPRCRVLOG\PSPRCRV_<Process Server Agent Name>_MMDD.log

At Midnight a new log file will be created to contain information for the current MMDD value.

The log file contains messages detailing event that transpired in the Process Scheduler Agent. This can include the following events:

- The time that a server agent was started, stopped, or suspended.
- Value of environment variables when the Process Scheduler Server Agent was started.
- Sleep time interval.
- Information sent to the command line to initiate the process request.
- Details of process requests currently running.
- Tally and detail of all queued requests that will be initiated.
- Tally of all active processes broken down by process type.

- Error messages explaining why a process request failed to complete successfully.
- SQL errors encountered by the PSPRCSSRV program.

The messages written to the log file are translated to the languages supported by PeopleSoft. The language of the messages is based on the preferred language set in the User Profile for the user ID used to start the Process Scheduler Server Agent.

Process Scheduler Server Agent SQL Trace file

The Process Scheduler Server Agent SQL Trace file is created when the **TraceSQL** variable in the Process Scheduler Configuration file has a value other than zero. This file contains the SQL traces issued by the Distribution Agent program PSDSTSRV. These traces are written to the file:

```
<Log Directory>\_PSPRCSSRVLOG\psprcssrv.trc
```

The SQL trace file doesn't delete any existing traces written from prior run of the PSPRCSSRV program and appends new SQL activity at the end of the file. It'll be a good practice to reset the TraceSQL to zero after you finished debugging the Process Scheduler Server Agent as this can grow quite large and may fill up your file server

Logging Levels

The Process Scheduler's logging system enables you to change the level of detail written to the log files. The mechanism chosen here uses the concept of a detail level and a fence. Messages are assigned a numeric detail-level value that reflects the importance of the event that triggers the message in the operation of the program. This ranges from simple progress messages (very detailed) to error messages when the program is about to abort (not detailed).

The fence is used to filter out messages that reflect more detail than is desired in a particular installation. A good visualization of this would be that a message must be able to leap the fence in order to be shown, with a lower number indicating a higher fence. Thus, with the fence set to two, only messages with a detail level less than two (that is, zero or one) would appear. The only exception to this is that level zero, messages and messages unable to be displayed in the standard message format cannot be filtered out.

The particular meaning of a given level is completely arbitrary, although a consistent convention should be followed. The Process Scheduler daemon (PSPRCSSRV) uses the following convention.

<i>Fence Level</i>	<i>Meaning</i>
0	Errors, critical messages, and connection header only.
1	Critical events. For the Process Scheduler, this includes Process start attempts.
2	Warnings
3	Informational
4	Detailed messages about the operation of the process, including sleeping messages.

5

Show everything. This is the default fence value.

The fence is determined by an entry in the server's Configuration file in the [Process Scheduler] section named LOGFENCE. Normal values are in the range of 0-5 with the default being 5 (all messages). A setting of 5 is recommended for installation and troubleshooting. A setting of 0 is good for an installed system that generally is working smoothly.

The logfence of a message can be seen in the Process Scheduler log file. In the following example, you can see the numeric values enclosed by parenthesis that are followed by the date and time.

```
[08/04/00 14:28:27](0) Server: PSNT sleeping for 15 seconds
[08/04/00 14:28:41](0) Server: PSNT looking for work
[08/04/00 14:28:41](5) Server: PSNT checking status...
[08/04/00 14:28:41](5) Server action mode: Ok (looking for requests)
[08/04/00 14:28:41](5) Checking Process cancels...
[08/04/00 14:28:41](4) Checking status of active processes...
[08/04/00 14:28:41](5) Process 9836 is still running as Session ID 711
[08/04/00 14:28:41](5) Process 9837 is still running as Session ID 634
[08/04/00 14:28:41](5) Process 9838 is still running as Session ID 703
[08/04/00 14:28:41](5) Info for array of Request(s) associated with a Job slated to be submitted
[08/04/00 14:28:41](5) Size of array: 1
[08/04/00 14:28:41](5) Info for array of Active Processes
[08/04/00 14:28:41](5) Size of array: 3
[08/04/00 14:28:41](5) Crystal : Active: 3 Max: 3
[08/04/00 14:28:41](5) Server: PSNT checking status...
[08/04/00 14:28:41](5) Server action mode: Submitting request
[08/04/00 14:28:41](5) Number of New Process Request(s) To Start: 1
[08/04/00 14:28:41](1) Process Instance: 9843 started (PID: 645)
[08/04/00 14:28:41](4) Starting process:: 9843
[08/04/00 14:28:41](4) Command Line: Y:\BIN\CLIENT\WINX86\PSSQR.EXE
[08/04/00 14:28:41](4) Param List: -CT ORACLE -CS -CD E800R21B -CA %ACCESSID% -CAP %ACCESSPWD%
[08/04/00 14:28:41](4) Working Dir: c:\apps\db\oracle8i\bin
[08/04/00 14:28:41](4) Session Id: 645
[08/04/00 14:28:41](0) Server: PSNT sleeping for 14 seconds
[08/04/00 14:28:55](0) Server: PSNT looking for work
[08/04/00 14:28:55](5) Server: PSNT checking status...
[08/04/00 14:28:55](5) Server action mode: Ok (looking for requests)
[08/04/00 14:28:55](5) Checking Process cancels...
[08/04/00 14:28:55](4) Checking status of active processes...
[08/04/00 14:28:55](5) Process 9836 is still running as Session ID 711
[08/04/00 14:28:55](5) Process 9837 is still running as Session ID 634
[08/04/00 14:28:55](5) Process 9838 is still running as Session ID 703
[08/04/00 14:28:55](5) Info for array of Request(s) associated with a Job slated to be submitted
[08/04/00 14:28:55](5) Size of array: 0
[08/04/00 14:28:55](5) Info for array of Active Processes
[08/04/00 14:28:55](5) Size of array: 3
[08/04/00 14:28:55](5) Crystal : Active: 3 Max: 3
[08/04/00 14:28:55](5) Info for array of Queued Request(s) found in Process Request table
[08/04/00 14:28:55](5) Size of array: 16
```

Example of log file

SQL Trace

The TraceSql variable is used to set the level of SQL trace. By selecting the numerical value representing each degree of tracing as described, you set your trace level. The list of trace levels from which you can choose appears in your configuration file as shown in the following example:

```
1=SQL Statements

2=SQL statment variables

4=SQL connect, disconnect, commit and rollback

8=Row Fetch (indicates that it occurred, not data)

16=All other API calls except ssb
```

32=Set Select Buffers (identifies that attributes of columns to be selected)

64=Database API specific calls

128=COBOL statement timings

256=Sybase Bind information

512=Sybase Fetch information

If you want SQL Statements; SQL statement variables; and SQL connect, disconnect, commit, and rollback information, you specify `TraceSql=7` (1+2+4).

Debugging

If you run into errors, you need to enable debugging and tracing. To do so, complete the following tasks:

- Set `LOGFENCE=5` in the `psprcs.cfg` file.
- Set `TraceSQL` to a desired value, if you wish the SQL Trace to be generated.

Maintenance

The following sections contain information that will be helpful in the general maintenance of your Process Scheduler Server Agent.

Days Before Purge

The Process Server Definition has a Days Before Purge setting that indicates the number of days before a process should be physically deleted from the request table. When the Process Scheduler Server Agent starts, it purges the processes meeting the following criteria automatically:

- Canceled
- Deleted
- Successful
- Unsuccessful client-based processes or those targeted to this server.
- Processes that have not been updated for the specified number of days.

If you want to purge files associated with all the processes from the table, you can choose the Purge Process Files option in the Server Definition.

Purging Process Requests

To periodically empty the Process Scheduler tables and file system, update the Purge Options found in the Process System page in Process Scheduler Manager. This purge performs the following tasks:

- Update statistics to all the Process Request tables prior to deleting content of this table.
- Purge all process requests with a last update date pass the value **Days Before Purge** and run status noted above from the Process Scheduler tables
- Delete all the subdirectories in the Log_Output directory associated with the process requests that are purged from the Process Request table if the **Purge Process Files** was specified in the Server Definition
- Purge the Report Repository tables with expired dates based on the **Retention Days** specified in the **System Settings** page
- Delete from the Report Repository all directories from processes that were purged from the Report Repository tables

System Settings

Default Settings


Last Process Instance:

Last Report ID:


Retention Days:


Operating System:

Purge Options

Next Purge Date: 

Next Purge Time:

Recurrence: 

 Save

System Settings page

[Home](#) > [PeopleTools](#) > [Process Scheduler Manager](#) > [Use](#) > **System Settings**

Process System

Default Settings

Last Process Instance:

Last Report ID:


Retention Days:

***Operating System:** ▼

Purge Options

Next Purge Date: 

Next Purge Time:

Recurrence: 

Next Purge Date	The scheduled date for the next file purge process to be run on the server.
Next Purge Time	The scheduled time for the next file purge process to be run on the server.
Recurrence	Select a recurrence for the purge process. If no Recurrence date is specified, Process Scheduler will reset the next purge date to the next calendar date at 12:00 AM.



Depending on your platform, the ability to run statistics before a purge may or may not be available to you. For that reason, PeopleSoft has set the DbFlags Control to zero (active) so that %UpdateStats is active.



For more information about %UpdateStats, see Using %UpdateStats.

Windows NT and Multiple Databases

PeopleSoft recommends that you only configure one Process Scheduler for each database on a Windows NT server.

Crystal

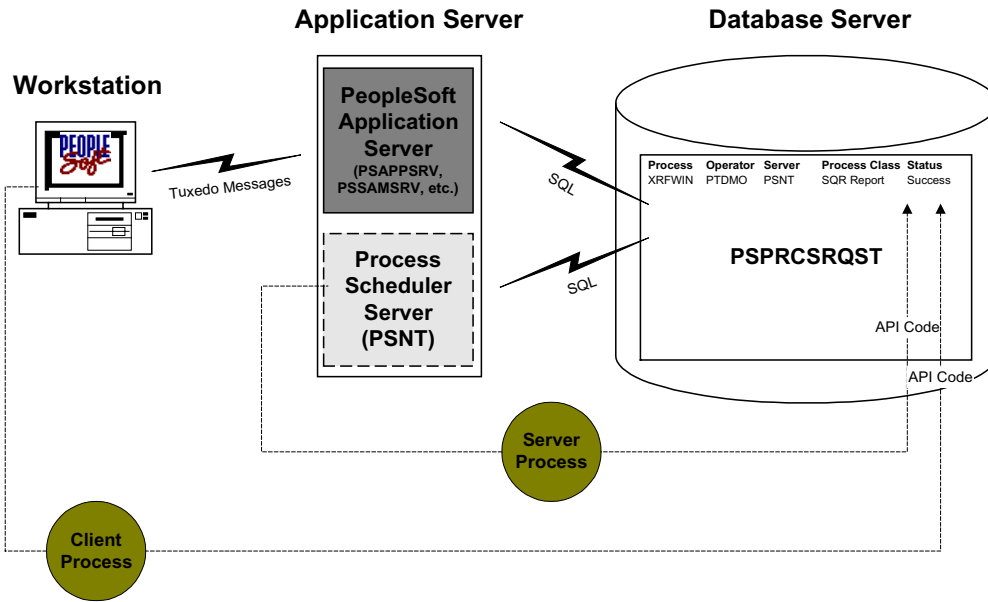
To run Crystal through the Process Scheduler Server Agent, you need to complete the following steps.

To run Crystal:

40. Run the Configuration Manager.
41. Make sure the Crystal Reports path is set correctly on the Process Scheduler tab.
42. Select the Client Setup tab.
43. Click Install PeopleSoft ODBC Driver.
44. Click Install Workstation.
45. Click Apply.

Process Scheduler in a Three-Tier Configuration

In a three-tier configuration, the environment becomes more complex, and a complicated environment can sometimes lead to a misunderstanding of the roles of each component and the software that runs on them. With Process Scheduler—a complex product in a two-tier environment—it is especially important to understand how each part of Process Scheduler functions in a three-tier environment. The following example illustrates the physical relationship between the basic components.



The dotted line around the Process Scheduler Server indicates it is a separate component that does not necessarily need to run on the application server. Also, note that each process, with Run Location of either client or server, runs independently, in a two-tier connection, against the database server.

The following sections describe in detail the role of each of the pictured components.

Workstation

A PeopleSoft workstation with a three-tier connection triggers process requests in exactly the same way as a two-tier workstation: by selecting File, Run from within a PeopleSoft application, clicking OK in the Process Request page, and so on. The only difference lies in the message the workstation generates when a user triggers a process request.

In a two-tier connection, the workstation sends a SQL request directly to the database server to add a row to the Process Request tables.

In a three-tier connection, when a user triggers a process request, the workstation generates a Tuxedo message that it sends to the application server, which inserts a row into the Process Request table.

When a user submits a client request in a three-tier connection, the application server inserts the row in the Process Request table, but the process runs on the client. For a server request, a row is inserted in the Process Request table, and the Process Scheduler Server Agent invokes the request.

As with the two-tier workstation, after users trigger a process request, they can use the Process Monitor to check the status of that request.

PeopleSoft Application Server

The application server runs the appropriate SQL against the database to add a row to PSPRCSRQST for the submitted Process Request. Process Monitor also uses a Tuxedo message that triggers the application server to fetch the Process Status from the Process Request table.

Process Scheduler Server Agent

In a three-tier environment, it is important to keep in mind that the Process Scheduler Server is a completely separate component/process from the PeopleSoft Application Server and its associated server processes. Although the Process Scheduler Server can run on the application server machine, it can also run on any supported batch server or database server.



In this context, application server refers to the physical machine on which the PeopleSoft Application Server runs. The PeopleSoft Application Server is the actual set of server processes controlled by BEA Tuxedo.

Like each of the server processes, such as PSAPPSRV, that run within a PeopleSoft Application Server domain, the Process Scheduler Server, as in PSNT, maintains its own SQL connection to the database server.

Since the Process Scheduler Server operates independently of the PeopleSoft Application Server and maintains its own connection to the database server, whether the environment is two-tier or three-tier is irrelevant to the Process Scheduler Server. In either configuration, the Process Scheduler Server maintains a two-tier connection to the database server.



Only process requests submitted to run on the server are run through the Process Scheduler Server. Client requests *do not* require the Process Scheduler Server.

Database Server

Just as in a two-tier environment, the database server houses the Process Request tables that contains a variety of data related to the requests, such as command line parameters and process status.

CHAPTER 5

Process Scheduler Report Distribution

Report distribution in PeopleSoft is closely tied to Process Scheduler Manager. Process Scheduler uses the Process Scheduler Server Agent to run the reports and log files that you submit using a process request. Once they have completed the Distribution Agent transfers these reports and log files to the Report Repository where they can be viewed from a Web browser using the PeopleSoft Internet Architecture (PIA). Report distribution options enable you to restrict access to these reports based on user ID or role ID as set up in Maintain Security.

This chapter explains how to set up and administer the various components of Process Scheduler so that you can create, distribute, and view your reports and log files.

Overview of the Distribution Agent

The Process Scheduler Distribution Agent (Distribution Agent) is responsible for transferring all files generated from a process request to the Report Repository. (The Report Repository is a where process output resides until it is accessed by Report Manager.) Reports or log files can be viewed from either Report Manager or Process Monitor when they are in the Report Repository. Files transferred to the Report Repository can include reports, logs, and trace files. Access to these files is controlled through PeopleSoft's security system.

The Distribution Agent is a process that runs on the same server as the Process Scheduler Server Agent (Server Agent). When the Server Agent is set up using the Server Definition page with a Distribution Node, the Distribution Agent is kicked-off either by the Server Agent or by Tuxedo. This will be based on how Process Scheduler is configured through PSADMIN.

The Server Agent and the Distribution Agent both check the status of each process in the Report List table. When the Server Agent initiates a process request that has an output destination type of Web, or if the Server Definition page is set up to transfer log/trace files to Report Manager, then an entry is inserted into the Report List table (PS_CDM_LIST). Once the program associated with the process finishes, the status in the Report List table is updated to **Generated** indicating that the files are ready to transfer to Report Repository. The Distribution Agent polls the Report List table to determine which process requests have finished running and then transfers them to Report Repository.

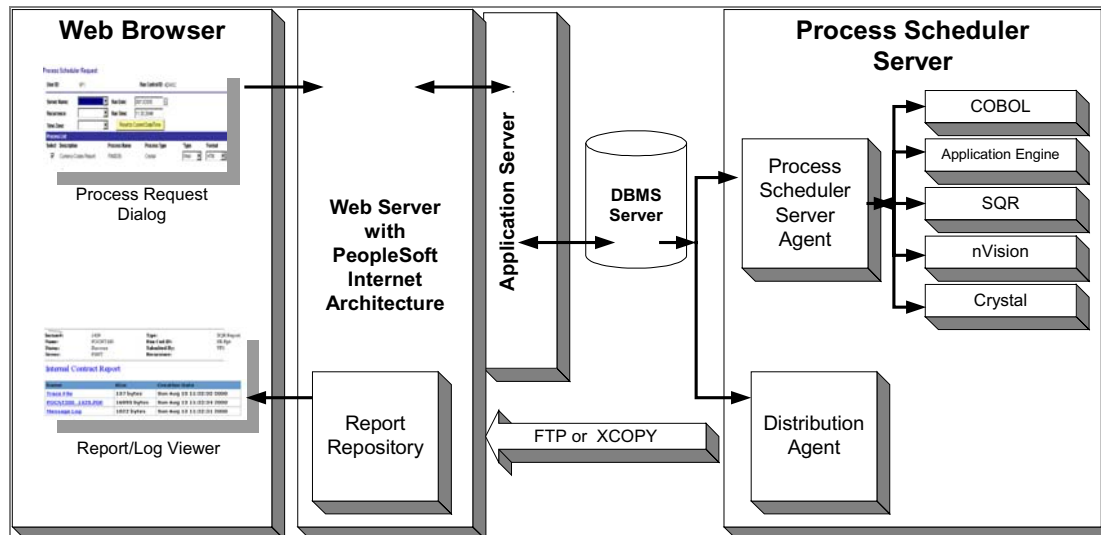
Prior to transferring files to the Report Repository, the Distribution Agent will perform the following steps:

- **Create the INDEX.HTML file.** The Distribution Agent inventories all the files generated by the program associated with the process request. It will create an index.html file cataloging all the report, log, and trace files. This HTML file is used by the Report Repository to link these files, so the file can be selected either from Report Manager or the Process Monitor Detail

page.

The Distribution Agent uses an HTML report template file to create the index.html. The HTML template file contains markers used to indicate header and detail information. You can make changes to this file provided the markers in the template file are left intact.

- **Transfer files to the Report Repository.** Once the index.html file is created for the process request, the Distribution Agent transfers this HTML file with all the report and log files to the Report Repository. For each process request that it transfers, a directory is created in the Report Repository using an RBRAN (Really Big Random Alphanumeric Name) schema. All the files for a process request will be stored in this directory.
- **Delete the directory from the Process Scheduler Server Agent's Log/Output directory.** When the output destination type specified for a process request is Web, all the files and the directory associated with the process request are deleted from the Process Scheduler Log/Output directory after the files are transferred to the Report Repository.



Report Distribution using PeopleSoft Internet Architecture

Understanding Run Status and Distribution Status

A process request with an output destination type of **Web** will have several different statuses as Process Scheduler Server Agent initiates the process request and as Distribution Agent transfers the files to the Report Repository. These different run statuses appear on the Process Monitor page and the different distribution statuses appear in the status column of Report Manager.

<i>Stage of the process request</i>	<i>Run Status in Process Monitor</i>	<i>Distribution Status in Report Manager</i>
New Process Request created.	Queued	Scheduled
Process Request is initiated by a Process Scheduler Server	Initiated	Processing

Agent.		
The program for the process request started.	Processing	Processing
Program has completed.	Posting	Generated
Distribution Agent attempts to transfer the files to the Report Repository.	Posting	Posting
Distribution Agent failed to transfer file to the Report Repository and hasn't reached the Maximum Transfer Retries.	Posting	Posting
All files are successfully transferred to the Report Repository	Successful	Posted
The Distribution Agent failed to transfer files to the Report Repository and had used up the Maximum Transfer Retries.	Not Posted	Not Posted

The Maximum Transfer Retries is a number the sets how many times that the Distribution Agent can fail and retry to transfer files to the Report Repository. The Message Log for the process request will be updated with this message:

```
<Server Agent Name> failed to post files to the report repository. Server
scheduled to try again on <date/time>. See log <transfer log file>.
```

The preceding table that describes status changes only applies to process requests that have output destination type of **Web**. Log files are transferred to the Report Repository when you select to transfer log files to the Report Repository in the Server Definition page. For process types with output other than Web, you can track their status through the Message Log.

Setting Up Report Distribution

To set up the Distribution Agent to be started by Process Scheduler Server Agent, you must define it in the Server Definition page in Process Scheduler Manager. You must also complete the setup of the Report Repository as described in the Installation and Administration guide, *“Setting Up the PeopleSoft Internet Architecture.”*

When you install the PeopleSoft Internet Architecture (PIA), the program automatically installs and does the setup for all the files for the Report Repository, including the Java class program PSREPORTS that is required to view reports and log files from the Process Monitor Detail and Report Manager pages. If the setup of the Report Repository has not been done, you can still run reports using the Process Scheduler Server Agent, but the report will remain in Posting status until the Distribution Agent is brought up to transfer the report to the Report Repository.

Before transferring the files to the Report Repository, you need determine which transfer protocol you'll use. If you have an NT Process Scheduler and an NT Web server, you have an option of doing either an XCOPY or FTP. (If FTP information is not specified, Process Scheduler will perform an XCOPY.) If you have NT Process Scheduler and a Unix Web server, you must use FTP. For XCOPY, the Report Repository directory must be a shared drive in your network. If you're using FTP, the FTP daemon must have been setup in your Web server.

To define the Distribution Node definition for the Report Repository:

1. Select PeopleTools, Process Scheduler Manager, Use, Report Node Definition.
2. Select the Add a New Value link and enter the Distribution Node name.

The Distribution Node page appears.

Distribution Node page

3. Enter the URL of the Web server with this format:

`http://<machine name>:<port number>/servlets/psreports.`

The **machine name** is the network name for the Web Server where the PeopleSoft Internet Architecture (PIA) was installed.

The **port number** is the TCP port set up in the Web Server. (If you installed the Web server software with the default TCP port of 80, then you do not need to specify the port number in the URL path.) If you installed the Web Server with a different value, then you must specify the port number in the URL path.

4. Enter setup information needed for transferring files.

If you are using FTP, enter the following information.

Home Directory	Specify the directory specified during the installation of PeopleSoft Internet Architecture as the Report Repository. The FTP user ID must have write access to this directory
Description	Enter a description of the server
Operating System	Select the operating system
FTP Address	Enter the machine name or the TCP/IP of the Report Repository.
Password	Enter the password for the user ID specified in the FTP ID field.
FTP ID	FTP user ID.
Confirm Password	Enter the password a second time as a confirmation.

Report Node Definitions

Node Name: rtsun12

Distribution Node Details

URL:

Home Directory:

Description:

Operating System:

FTP Information

FTP Address: **Password:**

FTP ID: **Operator Password (Encrypted):**

Distribution Node setup using FTP

If you are using XCOPY, enter this information.

Network Path Enter the UNC path that points to your Report Repository.

Report Node Definitions

Node Name: Machine Name

Distribution Node Details

URL:

Home Directory:

Description:

Operating System:

FTP Information

FTP Address: **Password:**

FTP ID: **Operator Password (Encrypted):**

Network Path:

Distribution Node setup using XCOPY

5. Save your settings.

To set up Distribution for your Process Scheduler Server

6. Choose PeopleTools, Process Scheduler Manager, Use, Server Definitions.
7. Enter the Server Name (for example, PSNT).

The Server Definition page appears.

8. Select the Distribution page.

Server Definition **Distribution** **Notification**

Server Name: PSNT

Sever Distribution Details

Distribution Node Name:

Maximum Transfer Retries:

Interval for Transfer Attempt: seconds

☐ Transfer Log Files to Report Repository

Distribution page

9. Click the Search button for the Distribution Node Name field and select the name of the Distribution node.
10. Enter a number for the Maximum Transfer Retries. This is the maximum number of times the server can try to send a report before it errors out.
11. Enter the number of seconds for the Interval for Transfer Attempt field. This is the interval between attempts to send the report.
12. Select the Transfer Log Files to the Report Repository is you want to transfer all log and trace files from processes that don't generate reports.
13. Save your settings.

Starting the Distribution Agent

If you intend to have the Distribution Agent started with the Process Scheduler Server Agent, you must have the Report Distribution Node defined for the Server Agent before you boot the Process Scheduler Server Agent using PSADMIN. The Distribution Agent will be started in one of two ways depending on the options specified in the Process Scheduler Configuration file

Starting as a non-Tuxedo service

When the Maintained by Tuxedo flag is set to *N*, the Distribution Agent is kicked-off as a separate process when Server Agent starts. The Server Agent monitors the Distribution Agent and ensures that it is running while the Server Agent is running. If, for some reason, the Distribution Agent stops running, the Server Agent starts another instance of the Distribution Agent. Additionally, the Server Agent stops the Distribution Agent when the Server Agent shuts down.

Starting as a Tuxedo service (not available in OS390)

When the Maintained by Tuxedo flag is set to *Y*, the Distribution Agent will be started as a separate Tuxedo service. This will only occur when you enter *Y* at the prompt to start the Distribution Agent. You'll see this prompt when configuring the Process Scheduler Server using PSADMIN:

```
Do you want the Distribution Agent started (y/n)? [y]:
```

When Tuxedo starts Process Scheduler, the Distribution Agent program (PSDSTSRV) will be started as shown in this example:

```

Starting Process Scheduler Server PSNT for Database PT812RC1 ...
Booting all admin and server processes in D:\ptdvl\APPSERU\prcs\PT812RC1\PTUXCFG
G
INFO: TUXEDO(r) System Release 6.5
INFO: Serial #: 1000000044, Expiration NONE, Maxusers 1000000
INFO: Licensed to: PeopleSoft

Booting admin processes ...

exec BBL -A :
      process id=368 ... Started.

Booting server processes ...

exec PSPRCSRU -A -- -C psprcs.cfg -CD PT812RC1 -S PSNT -A start :
      process id=114 ... Started.
exec PSDSISRU -A -- -C psprcs.cfg -CD PT812RC1 -S PSNT -A start :
      process id=382 ... Started.
3 processes started.

```

Troubleshooting

As Tuxedo starts the Distribution Agent, it triggers an initialization routine that will validate the following:

- The user ID and connect ID specified in the Process Scheduler Configuration file can log on to the database.
- The Server Agent has a valid Distribution Node entered in the Server Definition table.
- The Distribution Agent can access the Report Repository based on the settings defined in the Report Node Definition page.

If any of these validations fail, the Distribution Agent program will get an Application Initialization error message. If this occurs, check the Distribution Agent log file for the specific error. (See the following section on Distribution Agent Logging System for more information.)

```

Booting server processes ...

exec PSPRCSRU -A -- -C psprcs.cfg -CD PT812RC1 -S PSNT -A start :
      process id=392 ... Started.
exec PSDSISRU -A -- -C psprcs.cfg -CD PT812RC1 -S PSNT -A start :
      CMDTUX_CAT:1685: ERROR: Application initialization failure

tmboot: CMDTUX_CAT:827: ERROR: Fatal error encountered; initiating user error handler

tmshutdn -y

Shutting down all admin and server processes in D:\ptdvl\APPSERU\prcs\PT812RC1\PTUXCFG

Shutting down server processes ...

      Server Id = 101 Group Id = BASE Machine = RALCANTIA092999:      shutdown
      succeeded

Shutting down admin processes ...

      Server Id = 0 Group Id = RALCANTIA092999 Machine = RALCANTIA092999:
      shutdown succeeded
2 processes stopped. ■

```

Distribution Agent Logging System

The Log directory is used to store the Distribution Agent logs and transfer log files. These are files that most users will not normally need to review, unless there is a problem with running a process or some other reason to check the outcome of a process.

The log directory for the Distribution Agent is:

<Log Directory>_PSDSTSRVLOG\

The <Log Directory> corresponds to the directory specified in the Log/Output Directory variable in the Process Scheduler Configuration file (PSPRCS.CFG).

There are two log files used with the Distribution Agent—the Distribution Server Agent log and the Transfer log. Additionally, there is the Distribution Agent SQL Trace file

Distribution Server Agent Log

The Distribution Server Agent log is sent to the file:

<Log Directory>_PSDSTSRVLOG\PSDSTSRV_<Process Server Agent Name>_MMDD.log

The <Log Directory> corresponds to the directory specified in the Log/Output Directory variable in the Process Scheduler Configuration file (PSPRCS.CFG). At midnight each day, a new log file is created that contains information for the current MMDD value. The log file contains messages detailing event that transpired in the Distribution Agent. This includes the following events:

- Sleep time interval
- Detail of the process requests.
- Status of the transfer.
- Reasons to why a transfer of files failed.
- Retry attempt information. This occurs for instances when the initial attempt to transfer may have failed.

The messages written to the log file are translated to the languages supported by PeopleSoft. The language of the messages is based on the preferred language set in the User Profile for the user ID used to start the Process Scheduler Server Agent.

```
Dist Agent checking for new entries to post...
Posting new reports and log files...
Number of new entries to process: 3
Transfer Log: 3304, check file d:\21A\PSDSTSRVLOG\transfer_3304.log for status
1. Process Instance: 6026/Report Id: 4040/Descr: Billing Interface
   from directory: d:\21A\AE_BIIF0001_6026
2. Process Instance: 6027/Report Id: 4041/Descr: Recurring Voucher Contracts
   from directory: d:\21A\CRW_POY1051_6027
3. Process Instance: 6028/Report Id: 4042/Descr: IN Counting Sheet
   from directory: d:\21A\SQR_INS9051_6028
Successful post of report/log for Process Instance: 6028, Report Id: 4042
Successful post of report/log for Process Instance: 6027, Report Id: 4041
Successful post of report/log for Process Instance: 6026, Report Id: 4040
Dist Agent sleeping for 5 seconds
Dist Agent checking for new entries to post...
Dist Agent sleeping for 5 seconds
```

Example of Distribution Server Agent log file

Distribution Agent SQL Trace file

The Distribution Agent SQL Trace file is created when the TraceSQL variable in the Process Scheduler Configuration file has a value other than zero. This file contains the SQL traces issued by the Distribution Agent program PSDSTSRV. These traces are written to the file:

<Log Directory>_PSDSTSRVLOG\psdstsrv.trc

The SQL trace file doesn't delete any existing traces written from prior runs of the PSDSTSRV program and appends new SQL activity at the end of the file. It is a good idea to reset the TraceSQL to zero after you finished debugging the Distribution Agent, as this file can become quite large and may fill up your file server.

Transfer Log

The Distribution Agent detects that there are files ready to transfer by querying the Report List table (PS_CDM_LIST). When it transfers the files, it tables the information for all the process requests and assigns a Transfer log to this transfer attempt. Any activity from transferring the files for these process requests are recorded in a log file with this format:

```
<Log Directory>\_PSDSTSRVLOG\transfer_<Transfer Instance Number>.log
```

Here are examples of transfer log files for FTP and for XCOPY:

```
user ftpuser
verbose on

mkdir /data6/psreports/080913335408BAB393ED0F47F64A78BAC3ADB6867D14CFF6FB4871E98472966
257 MKD command successful.
cd /data6/psreports/080913335408BAB393ED0F47F64A78BAC3ADB6867D14CFF6FB4871E98472966EFA
250 CWD command successful.
ascii
200 Type set to A.
put "d:\21A\SQR_INS9051_6028\index.html" "index.html"
200 PORT command successful.
150 ASCII data connection for index.html (216.131.201.168,2324).
226 Transfer complete.
4610 bytes sent in 0.00 seconds (4610000.00 Kbytes/sec)

bin
200 Type set to I.
put "d:\21A\SQR_INS9051_6028\INS9051_6028.PDF" "INS9051_6028.PDF"
200 PORT command successful.
150 Binary data connection for INS9051_6028.PDF (216.131.201.168,2326).
226 Transfer complete.
1730 bytes sent in 0.00 seconds (1730000.00 Kbytes/sec)

ascii
200 Type set to A.
put "d:\21A\SQR_INS9051_6028\SQR_INS9051_6028.log" "SQR_INS9051_6028.log"
200 PORT command successful.
150 ASCII data connection for SQR_INS9051_6028.log (216.131.201.168,2327).
226 Transfer complete.
1080 bytes sent in 0.00 seconds (1080000.00 Kbytes/sec)

quit
221 Goodbye.
```

Sample transfer log using the FTP command

```

Copying d:\PTDMO\output\SQR_XRFWIN2_24 into the repository...
d:\PTDMO\output\SQR_XRFWIN2_24\SQR_XRFWIN2_24.log -> \\RALCANTA020100\psreports\081214105445
d:\PTDMO\output\SQR_XRFWIN2_24\SQR_XRFWIN2_24.out -> \\RALCANTA020100\psreports\081214105445
d:\PTDMO\output\SQR_XRFWIN2_24\SQR_XRFWIN2_24_1.PDF -> \\RALCANTA020100\psreports\081214105445
d:\PTDMO\output\SQR_XRFWIN2_24\SQR_XRFWIN2_24_2.PDF -> \\RALCANTA020100\psreports\081214105445
d:\PTDMO\output\SQR_XRFWIN2_24\index.html -> \\RALCANTA020100\psreports\081214105445DE96
5 File(s) copied
Successful copy of d:\PTDMO\output\SQR_XRFWIN2_24 to Repository
End of Transfer script

```

Sample transfer log using the XCOPY command

Using Report Manager

Report Manager is like your own personal “in box” of reports. As a part of Process Scheduler, it provides a secured means to view report content, and see content detail messages.

Using Report Manager, you can see all of reports you are authorized to view by simply opening your Report List in your browser.

To view your reports in Report Manager, select **PeopleTools, Report Manager, Inquire, Report List**.

Report List Archived Reports

View Reports For

User: PTDMO

Process Type:

Status:

Last: 1 Days

Refresh

Report List View All First 1-4 of 4 Last

Select	Report ID	Prs Instance	Report Description	Request Date/Time	Format	Status	Details
<input type="checkbox"/>	10	37	Generates 2 Copies ofXRFWIN	07/14/2000 10:50:22AM	Acrobat (*.pdf)	Scheduled	Details
<input type="checkbox"/>	9	31	Fields and Panels Cross Refere	07/14/2000 10:29:58AM	HTML Documents (*.htm)	Scheduled	Details
<input type="checkbox"/>	8	30	Fields Referenced by PeopleCod	07/14/2000 10:29:58AM	HTML Documents (*.htm)	Scheduled	Details
<input type="checkbox"/>	7	29	Applications and Fields Cross	07/14/2000 10:29:58AM	HTML Documents (*.htm)	Scheduled	Details

Delete

Click the delete button to delete the selected report(s)

Save

Previous tab

Next tab

[Report List](#) | [Archived Reports](#)

Report List page

If you have a lot of reports listed, you can sort the list by selecting a user ID, a process type, a distribution status, or when the report was posted to the Report Manager. Select the desired settings from the drop-down lists at the top of the page and click **Refresh**.

There are several distribution statuses, and knowing what they mean will help you to understand the progress of your job without having to check the Process Monitor.

Distribution Status

A status of **Scheduled** indicates that the process was just added to the report request. If a report has the status of **Processing**, it indicates that Process Scheduler has initiated the program and is running the process at that moment. A **Generated** report is one that has finished processing and all files are available for transferring. A report that is **Posting** is in the process of being transferred to the Report Repository.

Deleting Reports from Report Manager

You must have proper security authorization to delete a report from Report Manager. This function is generally reserved for administrators and super users, and the option will be unavailable to other users.



For more information about security authorization and administrative roles, see Granting Report Manager Administrative Roles.

To delete a report from Report Manager, simply select the checkbox associated with the report and click **Delete**. Reports that have been deleted do not appear in the Archived Reports list.

Report Details

When you click **Details** for a process, you'll see a detailed description of the process, including the instance number, the report ID, descriptive information, as well as distribution identifiers. The Expiration Date is calculated from the Retention Date you set in the System Settings page.

Report Detail	
Report	
Report ID: 1	Process Instance: 4
Name: NVSRUN	Process Type: nVision-Report
Employee Salaries by Dept.	
Distribution Details	
Distribution Node: GMICHNOW040700	Expiration Date: 11/10/2000
Distribute To	
Distribution ID Type	Distribution ID
User	PTDMO
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

Report Detail page

Archived Reports

The Archived Reports page lists reports that have been purged from the Report List after they have passed their expiration date. You cannot retrieve a purged report from this list, but it gives you all of the information you would need to retrieve a report from your backup or history copies of your reports.

Report List

Archived Reports

Process Type:

Archive Date:

or

Last:

10

Days

Refresh

Archived Report List

View All

First

1-8 of 8

Last

Report

Output Details

Archive Date	Report ID	PrCs Instance	Report Description	Request Date/Time	Output Format	Process Type
07/23/2000	8	34	Employee Salaries by Dept.	07/20/2000 3:04:21PM	HTML Documents (*.htm)	nVision-Report
07/23/2000	7	33	DR_33_BYGRADE.HTM	07/20/2000 1:59:13PM	HTML Documents (*.htm)	nVision-Report
07/23/2000	6	32	DR_32_BYGRADE.HTM	07/20/2000 1:58:44PM	HTML Documents (*.htm)	nVision-Report
07/23/2000	5	31	Salaries by Grade	07/20/2000 1:58:00PM	HTML Documents (*.htm)	nVision-Report
07/23/2000	4	30	Salaries by Grade	07/20/2000 1:48:04PM	HTML Documents (*.htm)	nVision-Report
07/23/2000	3	29	Salaries by Grade	07/20/2000 1:30:53PM	Microsoft Excel Files (*.xls)	nVision-Report
07/23/2000	2	28	Employee Salaries by Dept.	07/20/2000 11:47:01AM	HTML Documents (*.htm)	nVision-Report
07/23/2000	1	27	Salaries by Grade	07/20/2000 11:19:44AM	HTML Documents (*.htm)	nVision-Report

Save

Previous tab

Next tab

[Report List](#) | [Archived Reports](#)

Archived Reports – Report tab

Report List

Archived Reports

Process Type:

nVision-Report

Archive Date:

or

Last:

10

Days

Refresh

Archived Report List

View All

First

1-8 of 8

Last

Report

Output Details

Archive Date	Report ID	PrCs Instance	Report Directory	Output Directory
07/23/2000	8	34	\\GMICHNOW040700\psreports	072015042104D63026D21B1811E72911873047CEF8F3E51A85892E04C237D15DAB719CBF596E1B650BC04CA905C53B
07/23/2000	7	33	\\GMICHNOW040700\psreports	072013591304D63026D21B18564CCA5DE909AC0696E95E27A97945B6428773C17F68C7DD7F858CD3CC80D2D4600802
07/23/2000	6	32	\\GMICHNOW040700\psreports	072013584404D63026D21B189769B7CE69B5FE7E46B1FCBAF2344083530C63EA3283C8215C725646EA4DA2002F0990
07/23/2000	5	31	\\GMICHNOW040700\psreports	072013580004D63026D21B1881328AC6F16D7D62726127E27B9408F74241E3EF54E689EC4A09508057D649CC993A34
07/23/2000	4	30	\\GMICHNOW040700\psreports	072013480404D63026D21B18127D2F71EA0EA53C69A0519CA902937DC6BA1AD27894F400B3157A883E1862B8150B0F
07/23/2000	3	29	\\GMICHNOW040700\psreports	072013305304D63026D21B185A4D501036F520ACBDD90BE0D0FCB27E634A54309EF3FFF4AFE6BA14152D40D64811

Save

Previous tab

Next tab

[Report List](#) | [Archived Reports](#)

Archived Reports – Output Details page

Viewing Reports in Report Manager

Viewing a report is as simple as clicking the **View** button in your browser. When you do, the Report/Log viewer page is launched in a separate browser window displaying the output file and any log or message file that may be associated with it.



Report/Log Viewer



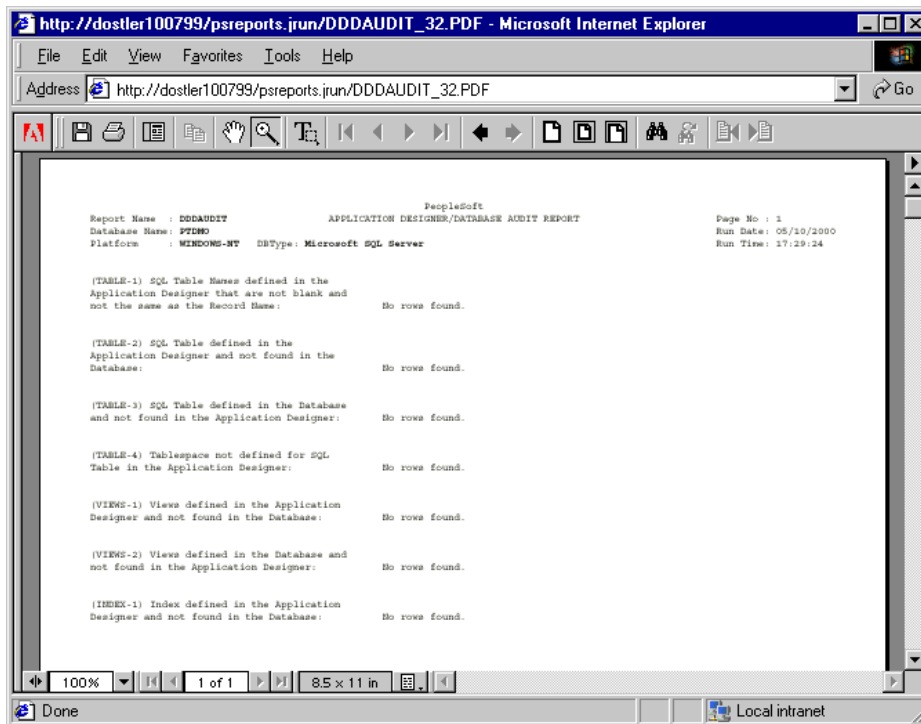
Instance:	32	Type:	SQR Report
Name:	DDDAUDIT	Run Cntl ID:	HRRpts
Status:	Success	Submitted By:	PTDMO
Server:	PSNT	Recurrence:	

Data Designer/Database Audit

Name	Size	Creation Date
DDDAUDIT_32.PDF	3843 bytes	Wed May 10 17:29:24 2000
Message Log	679 bytes	Wed May 10 17:29:02 2000

Report/Log Viewer page

Click on either of the hyperlinks to have the report or the message log displayed in another browser window. In this example, the DDDAUDIT_32.PDF file is displayed in Acrobat (.pdf) format.



Adobe Acrobat output file of report DDDAUDIT_32

Granting Report Manager Administrative Roles

Any user who maintains the content of Report Manager needs to be assigned a Report Manager Administration role in Maintain Security. With this administrator role, the user has the ability to do the following within the Report Manager:

- Change the Distribution List by adding/deleting a user ID or role ID.
- Delete a report from Report Manager.
- Alter the report's expiration date.

There is also another role called **Super User** that allows you to delete and update all report output in Report Manager. Super users are allowed to delete the report entry and update the distribution list or expiration date of report entries.

To grant a Report Manager Administrator role to a user ID:

14. Select Maintain Security, Use, User Profiles. Enter the user ID.
15. Select the **Roles** tab.
16. On the Role list, insert a new row, if necessary.
17. Click the search button next to the Role Name field, and select the role **ReportDistAdmin** or **ReportSuperUser**.

18. Save your changes.

User ID: 8001
Description: Schumacher, Simon

Role Name	Description	Dynamic
ReportDistAdmin	Report Distribution Admin	<input type="checkbox"/> Route Control + -

[Save](#) [Return to Search](#) [Next in List](#) [Previous in List](#)

[ID](#) | [General](#) | [Workflow](#) | [Roles](#) | [Audit](#) | [Administrator](#) | [Links](#)

User Profiles Roles page

Customizing the Report Index Template

The Distribution Agent uses the Report Index template to generate the INDEX.HTML file to list and link all reports and log files from a process request. The Distribution Agent determines which template file to use by retrieving the value assigned to the Report Template variable in the Process Scheduler Configuration file under the Report Distribution section.

```
[Report Distribution]
```

```
Report Template=%PS_HOME%\APPSERV\PRCS\WEB\rpt_index.html
```

You can change this template file to fit your needs. For instance, you can replace the PeopleSoft logo with your own company logo. However, you must be careful to not remove the markers used by the Distribution Agent. Inside the Report Template file, there are two markers that must not be deleted.

- **Process Request Detail Marker.** The Process Request Detail Marker is used to determine where the Distribution Agent will write the process request information that includes the process instance, run control ID and process description in the INDEX.HTML file. The marker text will be seen as this character string:

```
<%process_scheduler_header %>
```

- **Report List Marker.** The Report List Marker is used to determine where the Distribution Agent will write the table itemizing all the files generated by the process request. The marker text will be seen as this character string:

```
<%report_list%>
```


Sample File

```
<table border="0" cellspacing="0" width="624">

<%process_scheduler_header %></table>


<table border="0" cellpadding="3" cellspacing="0" width="50%"

style="COLOR: white; FONT-FAMILY: Verdana, Arial; FONT-SIZE: small; FONT-WEIGHT:
bold">

</table>


<%report_list%>
```

If you intend to change any images referenced in the Report Template file, you must update the image files found in the Web Server's Report Repository subdirectory <Report Repository Directory>\IMAGES.

Maintenance

The following sections contain information that will be helpful in the general maintenance of Report Manager

Retention Days

The Process Scheduler System Settings has a **Retention Days** setting that is used to calculate the expiration date of reports displayed in the Report Manager. The expiration date is determined by adding the Retention Days from the date the report was generated.



For more information about the Retention Days setting, see Defining System Settings.

Archiving Reports

When the **Purge Options** found in the **Process System** page in **Process Scheduler Manager** was setup to periodically to perform the purge, this triggers the functionality to also purge the reports from the Report Repository and archive the data into the Report Archive Table (PS_CDM_LIST_ARCH).



For more information about Archiving Reports, see Archiving Reports.

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