Notification Services 2.2 Quick Start Guide

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If you have comments or suggestions about this documentation, please send e-mail to Peregrine Customer Support.

This edition applies to version 2.2 of Notification Services. The first version of Notification Services is designated as 2.2 in order to correspond with the 2.2 version of the Peregrine Open Application Architecture.

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About this Guide

Notification Services 2.2 works with other Peregrine applications to enable users to send and receive notifications to one- and two-way communication devices. For two-way devices, it allows tracking of a yes/no reply when a confirmation question is asked in the notification.

The Quick Start Guide explains concepts, provides step-by-step instructions, and describes tasks that you can complete in Notification Services. It also provides the information that administrators need to configure and administer Notification Services and the e-mail-only version of the product, E-mail Service Within OAA.

By reading the Quick Start Guide, users will be able to:

- Check the Notification Services inbox.
- Check the Notification Services outbox.
- Send notifications.
- Set up a work schedule.
- Specify device preferences for each configured device, by time period and notification priority.
- Designate a backup user who will receive notifications when escalation takes place.
- Indicate that they are unavailable for receiving notifications.
- Indicate that they are out of the office for an extended period.

By reading the Quick Start Guide, administrators will be able to:

- Gather the information needed before configuring Notification Services.
- Login as an administrator.
- Set up the back-end database (either ServiceCenter or the OAA Repository).
- Configure E-mail Services settings.
- Configure E-mail settings.
- Configure the Notification Adapter settings.
- Configure Common settings.
- Configure Web Application settings.
- Configure the Notification Services settings.
- Set up device records in ServiceCenter or in the OAA Repository.

Book Audience

TheQuick Start Guide is intended for users and administrators of Notification Services 2.2. It provides step-by step procedures for user tasks. It also includes post-installation configuration instructions for Notification Services administrators.

This manual is printed and shipped with the product. You can view, search, and print this manual by accessing the .pdf from the table of contents in the online help. To access this .pdf of the *Notification Services Quick Start Guide*, click Help in the left pane, and then click the last item in the table of contents.

In contrast with the rest of this guide, Appendix B was written solely for administrators of the E-mail Service Within OAA product. This version of the product supports only e-mail notifications. Appendix B provides a map for configuring the E-mail Service Within OAA. The configuration tasks listed in this appendix are a subset of the configuration tasks for Notification Services 2.2.

Knowledge Requirements

Users need only a general knowledge of the Peregrine application from which they want to send and receive notifications. Users need to understand the use of notifications for work requests within the context of these applications.

Administrators need the same general knowledge as users. In addition, they need familiarity with configuring the database in either ServiceCenter or the OAA Repository.

Related Documentation

As you use Notification Services, you can refer to the following related documentation:

- Notification Services 2.2 online help, which gives step-by-step instructions for performing user tasks and is available from the Notification Services graphical user interface. To access the online help, click Help in the left pane. You can also click the Help topics for the Peregrine Portal icon (which looks like a question mark) in the top right of any window in Notification Services to display help specifically for that window.
- Notification Services 2.2 Release Notes, a document that provides information about features, known issues, sources of further assistance, and any information that surfaced too late to be included in the Quick Start Guide. This document is printed and shipped with the product. If the Release Notes are updated after the product ships, you can find the updated version on the Customer Support Web site.

Associated Applications

This guide does not contain information about products that can be used with Notification Services, such as ServiceCenter and Peregrine Property Asset Management. Refer to the appropriate product documentation for information about installing, configuring, and using associated applications. These applications must be installed and configured before you configure and use Notification Services.

Typographical Conventions

This guide uses typeface conventions to indicate special terms and actions. These conventions and their meanings are:

Convention	Meaning
Bold	Information that you must type exactly as shown appears in bold.
Italics	New terms appear in <i>italics</i> when they are first introduced. Variables and values that you must provide appear in <i>italics</i> . The exception to this is in Appendix A, <i>API Methods</i> , written for software developers, where variables are enclosed in angle brackets.
Monospace	Code examples, output, and system messages appear in a monospace font.

Special Elements

This book uses special elements to help you locate and interpret information. These special elements and their uses are shown in the following table:

Element	Usage
Important:	Information that is required to complete a task
Note:	Information that is of general interest

Organization of the Guide

The Quick Start Guide contains the following chapters and appendixes:

Chapter 1, *Introduction*, provides a product overview and explanations of key concepts such as cascading notifications to devices and escalation of notifications to backup users. It also explains the concept of device preferences for notification delivery. This chapter lists system features.

Chapter 2, *Installation*, refers readers to the source of installation information. It also refers readers to the source of information for configuring Notification Services in this Quick Start Guide: (Chapter 4, *Notification Services Administration*).

Chapter 3, Using Notification Services, explains concepts, provides step-bystep instructions, and describes tasks that you can complete in Notification Services.

Chapter 4, Notification Services Administration, provides the information that administrators need to configure and administer Notification Services.

Appendix A, Making API Calls, presents a set of principal methods developers can use to create and manage notifications using Notification Services. It includes the following topics:

- Making an API Call.
- Determining the Notification Services URL.
- API Methods.
- Schemas (including a description of each field).

Appendix B, Configuring the E-Mail Service Within OAA, is written solely for administrators of the E-mail Service Within OAA product. This version of the product supports only e-mail notifications. This appendix provides a road map of tasks for configuring the E-mail Service WIthin OAA. The configuration tasks referred to in this appendix are a subset of the configuration tasks for Notification Services 2.2.

Glossary. This glossary defines terminology and explains concepts used in conjunction with Notification Services.

Contacting Customer Support

Support for Notification Services 2.2 and other Peregrine products is available through Peregrine Systems Customer Support. Information about local support offices is available through the following contacts:

Peregrine's Center Point Web Site

Current details of local support offices are available through the following main contacts or through Peregrine's CenterPoint Web site at:

http://support.peregrine.com

After logging in with your login and password, from Contents on the left side of the page, click Whom Do I Call? to display the Peregrine Worldwide Contact Information.

Corporate Headquarters

Address: Peregrine Systems, Inc.

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(Mexico, Central America, and South America)

Fax: +(1) (858) 480-3928

E-mail: support@peregrine.com

Europe, Asia/Pacific, Africa

For support contact information for your country and product, see Peregrine's CenterPoint Web site at:

http://support.peregrine.com

You can also contact the Corporate Headquarters using the previous information.

Documentation Web site

For a complete listing of the current documentation, see the Product Documentation pages on the Peregrine Systems, Inc. Customer Support Web site at:

http://support.peregrine.com

You need the current user name and password to access this Web page.

For copies of manuals, you can download .pdf files of the documentation using the Adobe Acrobat Reader (also available on the Web site). Additionally, you can order printed copies of the documentation through your Peregrine Systems sales representative.

1 Introduction

CHAPTER

Product Overview

Notification Services is a centralized service for sending and receiving notifications through multiple communication devices and for tracking the status of these notifications. This service operates within the Peregrine Open Application Architecture (OAA) and includes a Get-It user interface and an open API for application integrations. It can be configured to use either the OAA Repository or ServiceCenter as its back-end database.

Notification Services 2.2 supports voice notifications through the services of third-party messaging products. For two-way devices, it enables users to send yes/no responses to questions asked in notifications. With Notification Services, users can check the delivery status of their notifications as well as recipients' responses. Notification Services supports sending attachments and pasting text or HTML from other applications into notifications. It also supports Web browsers and eight device types for transmitting notifications.

Supported Devices for Delivering Notifications

Notification Services formats notifications appropriately for delivery to the following devices:

- E-mail
- Fax
- Home phone

- Numeric pager
- Portable phone
- SMS device
- Two-way text pager
- Work phone

If you want to use fax or voice notification with phones or numeric pagers, you need a service contract with a third-party service provider for messaging. The supported providers are Telamon for the TelAlert product and Envoy World Wide for EnvoyXpress.

Device Preferences

With Notification Services, notification delivery is optimized based on recipients' preferences for the devices that should receive notifications. Device preference can vary by the time of day, according to a schedule associated with the preference. The device preference can also vary by the priority for the notification—low, normal, or high. Users set up their own preferences for the devices that are configured for them to receive notifications from Notification Services.

Cascading to Devices and Escalation to Backup Users

Notification Services supports cascading of notifications to subsequent device preferences for a recipient and escalation of notifications to a recipient's backup user. This section explains the concepts of cascading, escalation, and backup users. It also explains how cascading and escalation work in Notification Services.

Cascading to Device Preferences

Cascading refers to sending a notification to each preferred device for a recipient in the order of preference. Cascading occurs only for notifications sent using Default as the device. Cascading is triggered when a device does not return a completed status within the time interval established by the Notification Services administrator for each notification priority. For example, when Notification Services attempts to deliver a phone message to a phone that is busy, the phone does not return a Completed status. If the status is not Completed before the interval elapses, this indicates that the notification was not delivered. As a result, the notification is cascaded to the next device. The inclusion or lack of a confirmation question in a notification does not affect cascading.

Cascading is followed by escalation in certain situations. If a notification that includes a confirmation question is cascaded to all the recipient's preferred devices and no reply is received by the sender within the specified time interval, the notification is then escalated to a backup user. Cascading always occurs before escalation if both processes occur.

Cascading takes place for all notifications as long as the sender specified Default as the delivery device, and escalation takes place only for notifications that contain confirmation questions and only for recipients who have a backup user defined.

Escalation to a Backup User

Backup users are individuals that users choose to receive notifications when they are unable to respond themselves. Designating a backup user is optional. However, specifying a backup user is required for escalation to occur.

Escalation occurs when a confirmation question is included in a notification and no reply is received in a certain time interval. This time interval is established by the Notification Services administrator for each notification priority. The time before a notification is escalated to your backup user typically varies for low, normal, and high priority notifications. In other words, high priority notifications would typically be escalated more quickly than low priority notifications. It is also possible for the Notification Services administrator to specify that notifications of certain priorities not be escalated even though the initial recipient has specified a backup user.

Before escalation occurs, a notification is cascaded to all of the initial recipient's preferred devices. In contrast with cascading, which occurs only if the notification is sent using the default device, escalation to a backup user occurs regardless of the device used to send the notification. In other words, escalation occurs even if the sender selects a specific device for sending the notification rather than selecting the default.

An Example of Cascading and Escalation

A notification is sent to a user who has selected a backup user. The notification includes a confirmation question, and the question remains unanswered for the interval specified for cascading/escalation. At this point, the notification is cascaded to the recipient's subsequent device preferences, one-by-one each time that the interval elapses after a transmission. If the question still remains unanswered after the notification is sent to the last device, escalation to the backup is triggered and the notification is sent to the device preferred by the backup user. If the question remains unanswered after the interval elapses, the notification is cascaded to each device preference specified for the backup user, one-by-one after each interval, until an answer is received. If no answer is received from the backup, the notification is escalated to the backup user's designated backup. If that backup has a backup user, the process continues.

Use the following table to see the conditions that result in cascading to recipients' other device preferences and escalation to a backup user. In this table, the assumption is made that the interval established by the Notification Services administrator for cascading and escalation has elapsed.

Process	Conditions			Result
	Was the Default method used to send the notification?	Does the notification contain a confirmation question?	Did the original recipient reply to the confirmation question within the specified interval for the notification's priority?	Does this process take place under these conditions?
Cascading to other	yes	yes	yes	yes
device preferences, assuming that a	yes	yes	no	yes
Completed status was not returned for	yes	no	N/A (no question)	yes
the notification	yes	no	no	yes
	no	no	no	no
	no	no	N/A (no question)	no
	no	yes	no	no
	no	yes	yes	no
Escalation to a	yes	yes	yes	no
backup user, assuming that	yes	yes	no	yes
cascading already took place if	yes	no	N/A (no question)	no
applicable, and that	yes	no	no	no
a backup user has been defined	no	no	no	no
	no	no	N/A (no question)	no
	no	yes	no	yes
	no	yes	yes	no

Features for Users

Using this application, users can:

- Check their Notification Services inbox, read incoming notifications (including any attachments), and reply to the notifications.
- Check their Notification Services outbox.
- Send notifications that can include one or more attachments.
- Paste text or HTML from other applications into notifications sent using the Notification Services inbox or e-mail.
- Check the delivery status for notifications they sent and see recipients' replies to these notifications.
- Delete notifications from the outbox.
- Set up their work schedule and their preferences for the devices that are used to deliver notifications. The schedule and device preferences are used to determine which device should receive a notification, based on both the time of day and the priority for the notification (low, normal, or high).
- Designate a backup user who will receive notifications that are escalated when the initial recipient does not respond within a specified interval after the notification was cascaded to all of the recipient's device preferences.
- Indicate that they will be out of the office for an extended period, such as for vacation. In this case, notifications are sent to the devices that the recipient prefers for extended out periods.
- Make themselves temporarily unavailable for receiving notifications. In this case notifications are sent directly to the designated backup user, if a backup has been designated.

System Requirements

System requirements for Notification Services 2.2 are the same as for the Peregrine OAA Platform. See the Installation Guide for your integrating application for details.

2 Installation

Installing Notification Services

Notification Services 2.2 is installed with the Peregrine OAA platform. See the Installation Guide for your integrating application for installation instructions.

System requirements and supported platforms for Notification Services 2.2 and for the e-mail only product, E-Mail Service Within OAA, are the same as those specified in the Installation Guide for your integrating application.

Instructions for configuring Notification Services are provided in Chapter 4, *Notification Services Administration*, in this Quick Start Guide. Most of the configuration is performed in the **Admin Settings** window of the Peregrine Portal.

For information about configuring the e-mail only product, E-Mail Service Within OAA, see Appendix B, *Configuring the E-mail Service Within OAA*. The tasks for configuring this product are a subset of the tasks for configuring Notification Services 2.2.

3 Using Notification Services

Introduction

CHAPTER

This chapter explains how to use Notification Services. It provides step-bystep procedures for the following tasks:

- Logging in to Notification Services.
- Using the Notification Services inbox.
 - Checking your Notification Services inbox.
 - Viewing the detail for a notification in your inbox.
 - Viewing attachments in the Notification Services inbox.
 - Replying to a notification in the Notification Services inbox.
- Replying Outside the Notification Services inbox.
 - One-way and two-way devices.
 - Replying to a notification using e-mail.
 - Replying to a notification using two-way text pagers or cell phones with TelAlert or EnvoyXpress.
- Sending notifications.
- Using the outbox.
 - Checking your Notification Services outbox.
 - Checking the status of a notification you sent.

- Viewing the detail for a notification you sent.
- Deleting a notification.

Setting Preferences.

- Creating your work schedule.
- Before you begin setting your notification device preferences.
- Setting your notification device preferences for work hours.
- Setting your notification device preferences for off hours.
- Setting your notification device preferences for extended out periods.
- Indicating that you are out for an extended period.
- Indicating that you are unavailable for notifications.

Logging in to Notification Services

To log in to Notification Services, you begin by logging in to the Peregrine Portal.

To log in:

1 In the Peregrine Portal Login window, in the User Name box, type your user name.

Your user name here must match your contact name in ServiceCenter or in the OAA Repository, depending on which of these sources is used for people records in Notification Services.

2 In the Password box, type your password (which is case sensitive), and then click Login.

The Welcome window appears.

3 Click Notification Services.

The Check Incoming Notifications window appears. If there are notifications in your Notification Services inbox, information appears for each one. Otherwise, the inbox is empty.

Using the Notification Services Inbox

Use the procedures in this section to perform tasks using the Notification Services inbox.

Checking Your Notification Services Inbox

To check your Notification Services inbox:

1 Log in to the Peregrine Portal and Notification Services. (See *Logging in to Notification Services* on page 24.)

The Check Incoming Notifications window appears, and information is displayed for each incoming notification you have received.



2 Review the incoming notifications.

Refer to the following descriptions if you need help interpreting the information for each incoming notification:

From - The sender.

Sent - The date and time when the notification was sent.

Subject - The subject line of the notification.

Question - A confirmation question from the sender, phrased so that it can be answered either yes or no without any additional text. An unanswered question is what causes a notification to be escalated.

Device - The device or communication method used to send the notification. A value of **Default** means that the notification was delivered by the devices defined in your preferences.

Status - The status for the notification. The status is one of the following:

• Waiting - In the queue waiting to be sent.

- Sending In the process of being sent.
- Sent Already sent.
- Failed Not sent because the notification was undeliverable to one or more recipients.
- Completed The notification has been delivered successfully to all recipients. If a confirmation question was asked, the status is Completed only when all recipients have replied.
- **Escalated** The notification was escalated to a backup user.

Replies - The number of replies received to the confirmation question asked in the notification, expressed as a fraction of the number of replies expected from all recipients. For example, 0/1 indicates that no replies have been received and that one reply is expected.

Notes - Informational messages or error messages related to the transmission of the notification.

Viewing the Detail for a Notification in Your Inbox

To view the detail for a notification in your Notification Services inbox:

1 In the Check Incoming Notifications window, click any text in the notification.

The Incoming Notification Details window appears.



2 Review the notification details.

Use the following descriptions if you need help interpreting the information displayed in this window:

In the **Header** area:

Sender Name - The sender's name.

Priority - The priority that the sender assigned to this notification. The options are low, medium, and high.

Device - The device or communication method used to deliver the notification. The options are e-mail, fax, home phone, numeric pager, portable phone, SMS device, two-way text pager, and work phone.

Status - The status for the notification. The status is one of the following:

- Waiting In the queue waiting to be sent.
- Sending In the process of being sent.
- Sent Already sent.
- Failed Not sent because the notification was undeliverable to one or more recipients.

- Completed The notification has been delivered successfully to all recipients. If a confirmation question was asked, the status is Completed only when all recipients have replied.
- **Escalated** The notification was escalated to a backup user.

Sent - The date and time when the message was sent.

Errors - Any error messages that pertain to the delivery of this notification.

Subject - The subject line of the notification.

In the Content area:

The message text appears here.

Question - An optional confirmation question from the sender, phrased so that it can be answered yes or no without additional text.

Reply - A reply of yes, no, or blank. This defaults to blank until the recipient answers the confirmation question. Recipients can leave this blank if they choose not to answer the question.

Attachments - If the notification contains attachments, this list shows the attachment file names.

In the Recipients area:

Name - The recipient's name.

Current Device - The device currently being used to send this notification.

Status - The status of this message related to this recipient.

Answer - The recipient's answer to the yes/no confirmation question in the notification.

Error - Any errors that occurred during delivery of the notification to this recipient.

Viewing Attachments in the Notification Services Inbox

If a notification in your inbox contains one or more attachments, the file names for the attachments appear in the **Attachment** list that is used to select an attachment for viewing. You can also view attachments in your e-mail inbox.

To view an attachment in your Notification Services inbox:

- 1 In the Incoming Notification Details window, in the Attachments list, click the attachment you want to see.
- **2** Press the View file attachment button (which looks like a magnifying glass). The attachment appears.

Replying to a Notification in the Notification Services Inbox

The Notification Services inbox enables you to reply to notifications that contain confirmation questions. In this case, your reply can be yes, no, or blank. This inbox does not support sending additional text or adding attachments to your reply. To convey more than a yes/no response, use another communication device to reply.

To reply to a notification in your Notification Services inbox:

- 1 In the Check Incoming Notifications window, click anywhere in the notification.
 - The Incoming Notification Details window appears, showing the text of the notification. If the sender asked you a confirmation question, the question appears. If the notification includes an attachment, you can view the attachment by pressing the View file attachment button (which looks like a magnifying glass).
- 2 If there is a confirmation question and you want to reply to it, use the Response box to select Y or N. Otherwise, leave this blank.
- 3 Click Submit.

Your reply to the notification is sent, and the Check Incoming Notifications window appears.

Note: If the device for delivering the notification to you was e-mail, you will receive a duplicate message in your e-mail inbox in addition to the notification in your Notification Services inbox.

Replying Outside the Notification Services Inbox

Whenever a notification is sent to you, in addition to receiving it in your Notification Services inbox, you will always be notified on another device (unless you have designated yourself as unavailable for notifications). The device that is used depends on the preferences you set up for work hours, off hours, and extended out periods for notifications of low, normal, and high priority.

The device that is used also depends on the sender's selection in the **Device** list in the **Send Notification** window. The sender can only send to a device that is configured for you because only the recipient's configured devices are displayed in the **Device** list. If the sender selects **Default** in the **Device** list, your preferences are exercised. Otherwise, you may receive the notification on a device that is configured for you but is not your preferred device for that time period and notification priority.

One-way and Two-way Devices

Some devices support two-way communication, enabling you to reply to a notification on the same device used to receive it. Other devices support only one-way communication, transmitting the notification to you, but not enabling you to reply using the same device.

The following devices support two-way communication:

- E-mail.
- Home phone.
- Two-way text pager.
- Work phone.
- Portable phone with voice messaging from a supported service provider.

The following devices support one-way communication:

- SMS device (cell phone with Short Message Service, a protocol used in cell phone text messaging).
- Numeric pager.
- Fax.

Replying to a Notification Using E-mail

If the device used to deliver a notification to you was e-mail, you will receive a duplicate message in your e-mail inbox in addition to the notification in your Notification Services inbox. You can reply from your Notification Services inbox or from the e-mail application.

The advantage of replying using e-mail is that your reply can include text. When you reply from the Notification Services inbox, you can only answer the confirmation question. You cannot type additional text in your reply.

To reply to a notification using e-mail:

1 In your e-mail application, go into your e-mail inbox.

If your e-mail application supports HTML formatting for messages, you can reply using the HTML form that Notification Services provides. If your e-mail application does not support HTML formatting for messages, the notification will be formatted like any other e-mail message in your e-mail application.

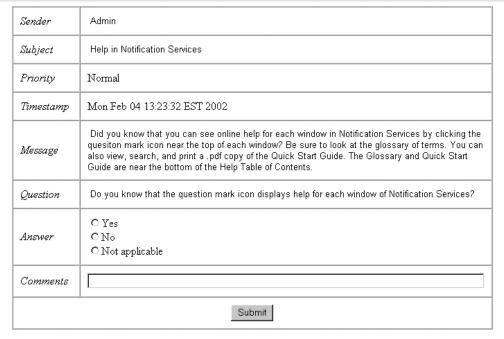
The HTML form looks like this:

Notification

from Notification Services

How to respond to the question in this notification:

- To use this HTML from, click Yes, No, or Not applicable for your answer. In the Comments box, type any additional comments, and then press Submit.
- To use the Reply feature of your e-mail application, as the first line of the e-mail, type Reply: Answer= followed by either
 Yes, No, or Not applicable. As the second line, type Reply: Comments= followed by your comments. Do not change the
 subject line. Delete the original text from the sender, and send the e-mail.



Note: The link at the top of this form is a URL. You can click it to open the **Incoming Notification Details** window and see the details for the current notification.

2 Use this table to determine your next step:

To use	Then
The HTML form	Fill in the information in the HTML form.
E-mail without the HTML form	Type Reply: before typing the content of your reply.

For notifications sent by e-mail, it does not matter whether you reply to them from your Notification Services inbox or your e-mail application (with or without the HTML form). Notification Services tracks your first reply either way. The advantage of e-mail is that you can type or paste text comments into your reply. Do not add e-mail attachments because they will not be received as part of your reply.

Replying to a Notification Using Two-way Text Pagers or Portable Phones with TelAlert or EnvoyXpress

To reply to a notification using two-way text pagers or portable phones with voice messaging from a supported service provider, follow the instructions provided by the product vendors for using these devices. These vendors are Telamon for the TelAlert product and Envoy World Wide for the EnvoyXpress product.

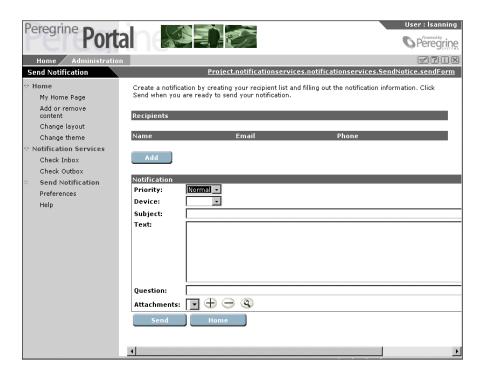
Sending Notifications

The **Send Notification** window is used to create and send notifications.

To create and send a notification:

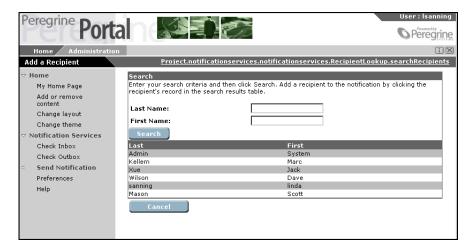
1 In the left pane click Send Notification.

The Send Notification window appears.



2 Click Add.

The Add a Recipient window appears.



3 Use this table to determine your next step:

If you want to	Then
Select a name that is already displayed in the list of recipients	Click the recipient's name.
Search for a name that is not displayed	In the Last Name box, type the last name of a recipient, then do one of the following:
	To search using only the last name, click Search, and then click anywhere in the row for the appropriate recipient's name.
	■ To add a first name to this search, in the First Name box, type the first name and click Search. Click anywhere in the search results showing the appropriate recipient's name.
	Note: If you are using ServiceCenter as your back-end database, you can select a group as a recipient.

The Send Notification window appears.

4 In the Priority list, select Low, Normal, or High.

This priority is used to determine the device that will be used to send the notification when you specify the default device for delivery. In this case, your priority is matched with recipients' device preferences for that priority, for work hours, off hours, and extended out periods.

5 In the Device list, select the device that will be used to send this notification. If there is only one recipient, the Device list shows options for Default and all of the devices that are configured for that recipient.

If there are multiple recipients, the Device list shows options for Default and any devices that are configured for all recipients.

If you select a device other than the default, the device you select is used instead of the device that the recipient prefers. For this reason, you should typically use Default as the device unless there is some reason to override the recipient's preferences.

Important: If you select a device other than the default, the device you select is used instead of the device that the recipient prefers and your notification will not cascade to the recipient's preferred devices. For this reason, you should use **Default** as the device unless there is an important reason to override the recipient's preference.

- 6 In the Subject box, type the subject for your notification.
- 7 In the Text box, type the notification. You can also paste text or HTML here from other applications.
- **8** In the **Question** box, type a confirmation question that can be answered either yes, no, or left blank.

This confirmation question allows the recipient to reply to the notification using the keys on a two-way device. Avoid specifying a one-way device when you send a notification that includes a confirmation question. (These devices are cell phone with Short Message Service, numeric pager, and fax.) If you specify a one-way device, the recipient cannot reply on the same device used to receive the notification. In this case, for Notification Services to track the reply, the recipient has to reply using the Notification Services inbox.

9 Use this table to determine your next step:

If you want to	Then
Send the notification without adding an attachment	Click Send.
Add one or more attachment	Click the Add a new file attachment (+) button. In the Select a File list that appears, browse for a file. Click the file name, then click Open, and then click OK. Repeat this step until you have selected all the attachments for this notification. Click Send.
Delete an attachment before sending the notification	In the Attachments list, select the file that you want to delete. Press the Remove file attachment (-) button. Click OK. Click Send.

The **Send Results** window appears, showing the same status information as the **Outgoing Notification Detail** window, and your notification is submitted for delivery.



10 If you want to send this notification to another recipient or modify it and send it to other recipients, click Go Back.

Note: Clicking **Go Back** does not enable you to change the notification that you sent when you clicked **Send** in the **Send Notifications** window.

Using the Outbox

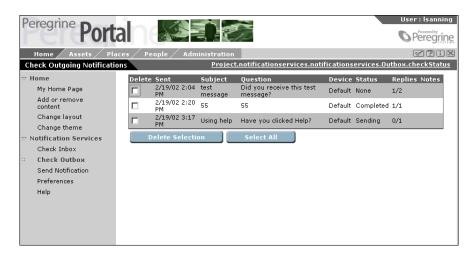
Use these procedures to perform tasks using the Notification Services outbox.

Checking Your Notification Services Outbox

To check your Notification Services outbox:

In the left pane, click Check Outbox.

The Check Outgoing Notifications window appears, showing information for all of the current notifications.



Note: The current notifications are all the ones that you have not deleted and that have not reached the expiration date. This interval is established by the Notification Services System administrator for all notifications on your system. By default, notifications are set not to expire. You cannot override this expiration date when you send a notification.

Checking the Status of a Notification You Sent

To check the status of a notification you sent:

In the Check Outgoing Notifications window, look below the far right column heading, Status. The status for a sent notification is one of the following:

- Waiting In the queue to be sent.
- Sending In the process of being sent.
- Sent Already sent.
- Failed Not sent because the notification was undeliverable to one or more recipients.

- Completed The notification has been delivered successfully to all recipients. If a confirmation question was asked, the status is Completed only when all recipients have replied.
- **Escalated** The notification was escalated to a backup user.

Viewing the Detail for a Notification You Sent

To view the detail for a notification in your Notification Services outbox: Click any text in the notification.

The Outgoing Notification Details window appears.



This window shows the message text and details about the notification. The notifications displayed here are ones that you have not deleted and that have not reached the expiration date set by your Notification Services administrator.

Deleting a Notification

Important: Exercise caution when deleting notifications. When you delete a notification from your outbox, the notification is automatically deleted from the inboxes of all the recipients for that notification, regardless of the notification's status. Deleting the notification also stops cascading and escalation.

Notifications can be deleted from the outbox, but not from the Notification Services inbox.

To delete a notification:

- 1 In the Check Outgoing Notifications window, select the check box in the Delete column for a notification you want to delete. If there are additional notifications you want to delete, select the other check boxes.
- 2 Click Delete Selection.

The notifications are deleted.

Note: If you want to delete all the notifications in your outbox, click **Select**All, and then click **Delete Selection**. You can also delete a notification from the **Outgoing Notifications Details** window by clicking the **Remove Notification** button.

Setting Preferences

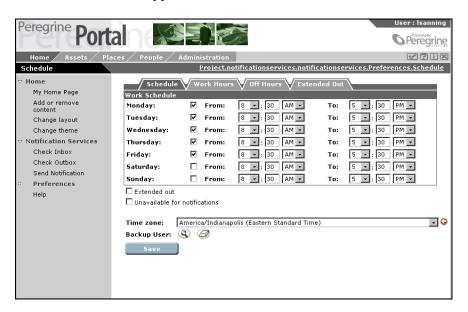
This section explains how to:

- Set up your typical work schedule.
- Specify your time zone.
- Designate a backup user for escalation purposes.
- Specify your device preferences for notification delivery during work hours, off hours, and times when you will be out of the office for extended periods. You can specify these device preferences for three levels of notification priority (low, normal, and high).
- Indicate when you are out of the office for an extended period.
- Indicate when you are unavailable for receiving notifications.

Creating Your Work Schedule

To create your work schedule:

1 In the left pane, click **Preferences**. The **Schedule** window appears.



- 2 In the Schedule window, select the check box for each day of your typical work week.
- 3 In the From and To lists for each work day, select the time when your work day begins and ends. Be sure to select AM or PM for each time.
- 4 Skip the check boxes for Extended out and Unavailable for notifications. These are used later when you need to indicate that you are out of the office for an extended period or you are unavailable for notifications.
- 5 In the Time zone list, select your time zone, and then click Save.
- 6 Next to Backup User, click the Employee Lookup icon. (This looks like a magnifying glass.)
 - The Employee Lookup window appears.

Note: Designating a backup user is optional. The backup user receives the notification sent to you if a notification is escalated. Escalation occurs when a confirmation question is included in a notification and no reply is received in a certain time interval. This time interval is established by your Notification Services administrator for each notification priority. When the sender chooses the default device, notifications are cascaded to all of the initial recipient's preferred devices before being escalated to the backup user.

7 In the Employee Lookup window, click a name or type a first or last name and click New Search.

Note: Be sure to click New Search, rather than pressing Enter.

8 In the search results, click the name of the person you want to choose as your your backup user.

Note: If you are using ServiceCenter as the back-end database for Notification Services, this lookup is case sensitive, requiring you to capitalize the first letter of each name. The lookup is not case sensitive if the OAA Repository is used as the back-end database.

The Schedule window appears, with the Backup User box showing the name you selected.

9 Click Save.

Your work schedule is now set up and you are ready to indicate your preferences for the devices you want to use to receive notifications for work hours, off hours, and extended out hours.

Before You Begin Setting Your Notification Device Preferences

You can specify your device preferences for notification delivery during work hours, off hours, and times when you will be out of the office for extended periods.

You can select as many as eight device preferences, if that many devices are configured for you. You can also select Never use, and that device will never be used in the context where you made that selection.

One-way and Two-way Communication

When you are determining your preferences for devices, be aware that some devices support two-way communication and others support only one-way communication. With two-way communication, you can reply to the notification on the same device where you receive it. These devices are:

- E-mail.
- Home phone.
- Two-way text pager.
- Work phone.
- Portable phone with voice messaging from a supported service provider.

If only one-way communication is supported on the device, you can receive the notification on the device, but you will have to reply to it using the Notification Services inbox in order for Notification Services to track your reply.

The one-way devices are:

- SMS device (cell phone with SMS).
- Numeric pager.
- Fax.

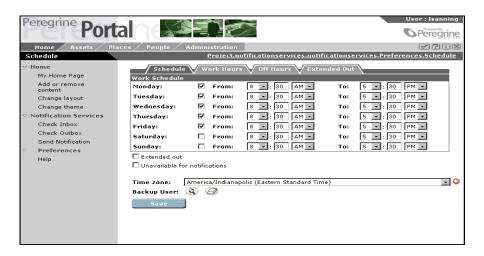
Setting Your Notification Device Preferences for Work Hours

The Work Hours window shows all of the devices that are set up for you to receive notifications from Notification Services. Next to each device, you can specify your preference for receiving notifications using that device for notifications of low, normal, and high priority. To add a device that does not appear here, contact your Notification Services administrator.

To set your notification device preferences for work hours:

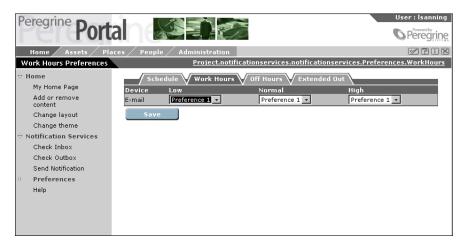
1 In the left pane, click Preferences.

The Schedule window appears.



2 Click the Work Hours tab.

The Work Hours Preferences window appears, showing the devices that have been configured for you to receive notifications in Notification Services.



- 3 In the Low column for the first device, designate your preference for receiving notifications of low priority on this device during work hours.
- **4** In the **Normal** column for the first device, designate your preference for receiving notifications of normal priority on this device during work hours.
- 5 In the High column for the first device, designate your preference for receiving notifications of high priority on this device during work hours.

- **6** Repeat steps 3 through 5 for each device.
- 7 Click Save.

Your device preferences are set up for work hours for notifications of each priority.

Setting Your Notification Device Preferences for Off Hours

Click the Off Hours tab and follow the steps for Setting Your Notification Device Preferences for Work Hours, only this time make your selections for the devices you prefer during the hours when you are *not* at work.

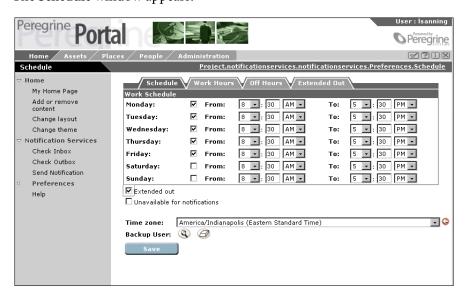
Setting Your Notification Device Preferences for Extended Out **Periods**

Click the Extended Out tab and follow the steps for Setting Your Notification Device Preferences for Work Hours, only this time make your selections for the devices you prefer when you are out of the office for extended periods.

Indicating That You Are out for an Extended Period

To indicate that you are out of the office for an extended period:

1 In the left pane, click Preferences. The Schedule window appears.



2 In the Schedule window, select the check box for Extended out, and then click Save.

Notifications are sent to the devices you specified in your extended out preferences. If you want to verify that your preferences for extended out are still current, click the Extended Out tab and review the devices you specified.

When you return to the office after your extended out period, clear this check box.

Indicating That You Are Unavailable for Notifications

There may be times when you want to have all your notifications routed immediately to your backup user. To do this, you can make yourself unavailable for notifications.

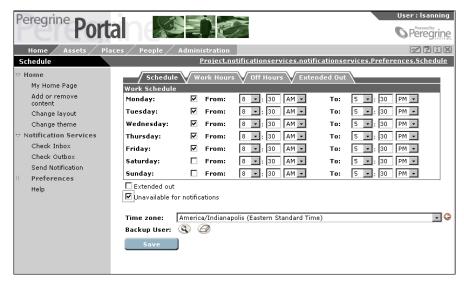
Important: It is important to consider designating a backup user if you are going to make yourself unavailable for notifications. When you make yourself unavailable and you have a backup user, notifications are sent to your backup and you will receive a copy of the notification in your inbox. When you make yourself unavailable and you have *not* designated a backup, you will only receive a copy of the notification in your inbox.

> Using this feature without a designated backup is typically appropriate only if the notifications you receive are not critical or highly time-sensitive.

To indicate that you are unavailable for notifications:

1 In the left pane, click Preferences.

The Schedule window appears.



2 In the Schedule window, select the Unavailable for notifications check box, and then click Save.

Notifications are sent to your backup user immediately, not to your preferred devices. However, you do receive a copy of these notifications in your Notification Services inbox. You will be able to identify which messages in your inbox were sent to your backup user because the text in the Status column for those messages will say escalated.

When you are ready to begin receiving notifications again, clear this check box.

4 Notification Services Administration

Administration Overview

The administrator is responsible for configuring Notification Services after it is installed. The configuration tasks differ, depending on whether you have installed Notification Services 2.2 or the E-mail Service Within OAA.

Notification Services 2.2 supports multiple devices for sending notifications. In contrast, the E-mail Service for OAA version supports e-mail as the only device for sending notifications. If your installation is E-mail Service only, see Appendix B for an explanation of the tasks you need to perform. The tasks listed there are a subset of the administrative tasks in the current chapter, Notification Services Administration.

Administration involves building database tables, configuring tabs in the Admin Settings window of the Peregrine Portal, and configuring devices for users of Notification Services. See *Configuration Overview* on page 54 for details.

Data Source Overview

All notifications that are transmitted by Notification Services are stored in a back-end database. The back-end database is used to:

- Retrieve contact information: the contact ID (user or people record) and the devices that are set up for that contact.
- Store Notification Services data, including user preferences.

The back-end database can be either ServiceCenter or the OAA Repository.

As a Notification Services administrator, you need to configure Notification Services to store its data in one of these databases. The steps for accomplishing this are covered in the following topics: *Configuring the Notification Adapter Settings* on page 61 and *Configuring the Web Application Settings* on page 63.

You also need to build database tables in either ServiceCenter or the OAA Repository. For ServiceCenter, see *Building Database Tables in ServiceCenter* on page 53 and for the OAA Repository, see *Building Database Tables in OAA* on page 50.

Building Database Tables

This section provides instructions for building database tables in the appropriate back-end database. As a Notification Services administrator, you need to build the database tables *before* beginning to configure Notification Services.

Before You Begin Building Database Tables

Before you begin building database tables, determine which of the following data sources you will use as your back-end database:

- The OAA Repository.
- ServiceCenter.

Building Database Tables in OAA

If you are using the OAA Repository as the back-end database for Notification Services, use the procedures in this section to prepare for building database tables and to build them.

Before You Build Database Tables in the OAA Repository

The OAA Repository is a database interface that runs on top of standard DBMSs such as Oracle. Before you build database tables in the OAA Repository, you need to add a system variable and the related variable value to your OAA server. You also need to use the rome tab of the Admin Settings window to set up the user name, password, and URL for your Oracle database.

To add a required system variable and value to your OAA server:

1 Add a system variable called JAVA HOME with the variable value being the root of your JDK directory. For example:

c:\jdk1.3.1 01

This is the default directory where the JDK is installed.

You have added the required variable and value to your OAA server.

2 Go to the next procedure.

To specify the URL, user name, and password needed to use Oracle with the **OAA Repository:**

1 In the Welcome window in the Peregrine Portal, click the Admin button. The Control Panel window appears.



- 2 In the left pane, click Settings. The **Admin Settings** window appears.
- **3** Click the **rome** tab.

4 Scroll down to the **Database URL** box, and then type the URL to your Oracle database.

Use the following syntax for the URL:

jdbc:oracle:oc8i:@oracleServiceName

- where *oracleServiceName* is the name of the service you selected when you configured Oracle on the OAA server.
- 5 In the **Database User Name** box, type the user name for accessing the Oracle database.
- **6** In the **Database User Password** box, type the password for the database user name.

You have specified the URL, user name, and password that are needed to use Oracle with the OAA Repository.

Procedure for Building Database Tables in the OAA Repository

During the installation of your integrating application, table definitions were copied onto your system. These definitions must be deployed to build the database tables for Notification Services. This process also loads enumerated data values, creates an administrative user, and loads initial currency conversion values.

The table definitions are deployed to your Oracle database using a batch file called tblcreate.

To build Notification Services tables in the OAA Repository:

1 Open a DOS command prompt window.

You may want to configure your DOS window to buffer the maximum number of lines so that you can scroll back up to see the script output.

2 Change directories to:

Tomcat \webapps\oaa\WEB-INF\etc

where *Tomcat* is the location where the Tomcat application server was installed. For example, C:\jakarta-tomcat-3.2.4

This is the directory in which the tblcreate files are located.

3 Type tblcreate, and then press Enter.

The tblcreate script builds the database tables automatically.

After running the tblcreate script the first time, go to the following procedure for troubleshooting (Troubleshooting the tblcreate Build). After running tblcreate successfully with no error messages, you are ready to begin configuring Notification Services.

Troubleshooting the tblcreate Build

When the build process is complete, review the output and verify that SQL statements exist. If there are error messages indicating that deployment of the tblcreate files was not successful, verify that your database connection strings are correct, and then rerun tblcreate.

Building Database Tables in ServiceCenter

If you are using ServiceCenter as the back-end database for Notification Services, use the following procedure to build database tables.

To build Notification Services tables in ServiceCenter:

- 1 Start the ServiceCenter client, and log in as falcon.
- **2** Click the **Toolkit** tab.
- 3 Click Database Manager.
- 4 Click **Options**, and then click **Import**.
- 5 Type the location of the unload script that is included in the installation: Tomcat/WEB-INF/etc/notification.unl where *Tomcat* is the location where the Tomcat application server was installed. For example, C:/jakarta-tomcat-3.2.4
- 6 Click Load FG.

ServiceCenter builds the database tables automatically. You are ready to begin configuring Notification Services.

Configuration Overview

Configuration for Notification Services is performed in the Peregrine Portal rather than within the Notification Services application. Your responsibility as a Notification Services administrator involves configuring the administration settings in the **Admin Settings** window of the Peregrine Portal. The **Admin Settings** window includes the following tabs which you use to configure Notification Services.

Use this tab	То
E-mail Services	Set the expiration interval to determine when notifications are removed from the database.
	Set up the path and file name prefix for the daily log file.
	Determine whether debug information is included in the log file.
	Set up targets.
E-mail	Configure the inbound and outbound e-mail servers.
Notification Adapter	Set the alias for the back-end database.
Common	Specify the default path for attachment files in the Attached files' path box.
	Enable script polling in the Enable script pollers box.
	Specify the URL for the Peregrine Portal server in the Server URL box.
Web Application	Set the alias for the back-end database.
rome	Set up the user name, password, and URL for your Oracle database if you are using the OAA Repository as your back-end database.
Notification Services	Configure the general Notification Services settings and settings used to cascade and escalate notifications. If you want to use fax or voice notification with phones or numeric pagers, you also use this tab to configure settings for third-party service providers.

Important: Each time you change a setting on one of the tabs in the Admin Settings window, you need to click Save and then reset the Peregrine Portal server from the Control Panel for the changes to take effect.

Your responsibility for configuring Notification Services also involves setting up users (contact IDs) and devices for them in either ServiceCenter or the OAA Repository. The devices are used to deliver notifications to the users. Instructions for setting up devices are included in this chapter. For information on setting up contact IDs, refer to either your ServiceCenter or Peregrine Portal OAA documentation.

This chapter explains the items of information that you need before you begin configuring Notification Services. It also provides procedures for all of the configuration tasks.

Configuration Tasks

The following procedures provide step-by-step instructions for configuring Notification Services.

Before You Begin Configuring Notification Services

Follow this procedure to gather information about your inbound and outbound e-mail servers. If you plan to use voice and fax notifications, use this procedure to gather information about your third-party service provider. You need this information to configure Notification Services.

- 1 Gather the following information about your inbound e-mail server:
 - The host name of your inbound e-mail server.
 - The login and password for the Notification Services inbound e-mail account.
 - The mail protocol used for your inbound mail server (either IMAP or POP3).

Note: You need to set up an e-mail account to be used solely for Notification Services. This account on the inbound e-mail server is used to receive recipients' responses to notifications.

- **2** Gather this information about your outbound e-mail server:
 - The host name of your outbound e-mail server.
 - The login, password, and e-mail address for the Notification Services email account.

Important: If your enterprise has a firewall, you must use an outbound server that can reach beyond the firewall in order for Notification Services to send notifications using SMS devices or text pagers.

3 If you want to use fax or voice notification with phones or numeric pagers, an account needs to be set up with at least one of the following service providers: Telamon or EnvoyWorldWide. In addition, you need the following information from the service provider.

For the EnvoyWorld Wide EnvoyXpress product:

- Envoy URL.
- Envoy user name and password.
- Envoy EOM user name and password.
- Envoy domain.

For the Telamon TelAlert product gather the following information, including vendor recommendations for the settings listed here:

- TelAlert host names.
- TelAlert response configuration name used to prompt for replies.
- TelAlert connect attempts the number of attempts to connect to the TelAlert server before giving up.
- TelAlert connect timer the number of seconds to wait for the connection to take place.
- TelAlert connect pause the number of seconds for the TelAlert server to wait before attempting to connect again.
- TelAlert connect wait time the number of seconds to wait for a response after the connection is made.
- TelAlert acknowledgment wait time the amount and unit of time to wait for acknowledgement replies in seconds, minutes, or hours.
- TelAlert user and password used to connect to the TelAlert server.
- TelAlert voice configuration name for voice alerts.
- TelAlert interactive voice configuration name for interactive voice alerts.
- TelAlert Fax configuration name for fax alerts.

Logging in as an Administrator

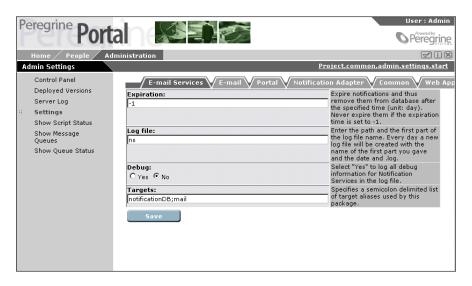
- Log in to the Peregrine Portal.
 For instructions on logging in to the Peregrine Portal, refer to the documentation for your integrating application.
- 2 In the Welcome window, click the Admin button. The Control Panel window appears.



3 In the left pane, click **Settings**.
The **Admin Settings** window appears.

Configuring E-mail Services Settings

1 In the Admin Settings window, click the E-mail Services tab.



Notice that this is different from the E-mail tab.

- 2 In the Expiration box, specify the number of days to wait before notifications expire and are removed from the database. The default is -1. This value means that notifications never expire. Considering the fact that notifications cannot be deleted from users' Notification Services inboxes, you may want to change this default value so that notifications do expire.
- 3 In the Log file box, type the path and the first characters of the log file name. Each day, a new log file will be created with the file name prefix you specify here, the date, and a .log extension.
- 4 In the Debug box, choose either Yes (to turn debugging on) or No (to turn debugging off and log only failures.
- 5 In the **Targets** box, leave the default list of target aliases used by this package unchanged.
- 6 Click Save.

The Control Panel window appears, displaying the following message:

The settings have been saved. To ensure all changes take effect, you must reset the Peregrine Portal server.

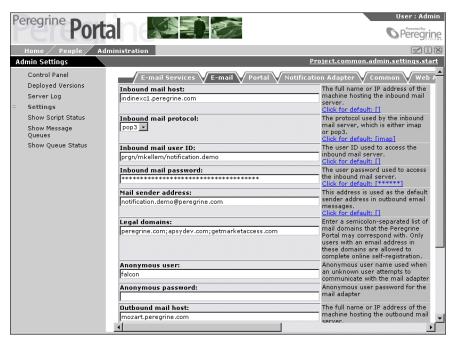
7 Click Reset Server.

The following message appears:

The Archway servlet and its Adapter connections have been reset successfully. You have configured the settings for the E-Mail Services tab of the Admin Settings window.

Configuring E-mail Settings

1 In the Admin Settings window, click the E-mail tab.



Notice that this is different from the E-Mail Services tab.

- 2 In the Inbound Mail Host box, type the full name or IP address of the machine host for the inbound e-mail server.
 - This is the server used by Notification Services to receive recipients' responses to notifications.
- 3 In the Inbound mail protocol list, select the protocol used by the inbound email server: either imap or pop3.
- 4 In the Inbound mail user ID box, type the user name for accessing the inbound e-mail server.
 - This is an administrative e-mail account that Notification Services uses to receive replies to notifications from e-mail clients.

- 5 In the **Inbound mail password** box, type the user password for accessing the inbound mail server.
- **6** In the **Mail sender address** box, type the address for the Notification Services e-mail account.
 - This is an administrative e-mail account that Notification Services uses to send notifications from e-mail clients.
- 7 In the Legal domains box, type a semicolon-separated list of mail domains that the OAA Repository or ServiceCenter correspond with. Only users with an e-mail address in these domains can complete online self-registration in the Peregrine Portal.
- **8** In the **Anonymous user** box, type the user name to be used when an unknown user attempts to communicate with the mail adapter.
- **9** In the **Anonymous password** box, type the user password for the anonymous user name for accessing the mail adapter.
- 10 In the Outbound mail host box, type the full name or IP address of the machine host for the inbound e-mail server.
 - This is the server used by Notification Services to send notifications.
- 11 In the Outbound mail user ID box, type the user ID used to access the outbound mail server.
- 12 In the Outbound mail password box, type the user password used to access the outbound mail server.
- 13 In the Adapter box, type the full class path for the mail adapter associated with this target.
- 14 Click Save.

The Control Panel window appears, displaying the following message:

The settings have been saved. To ensure all changes take effect, you must reset the Peregrine Portal server.

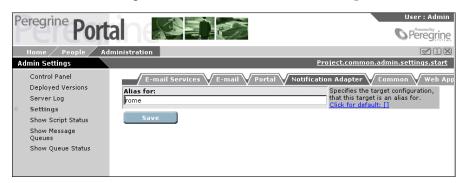
15 Click Reset Server.

The following message appears:

The Archway servlet and its Adapter connections have been reset successfully. You have set up the inbound and outbound e-mail servers for Notification Services.

Configuring the Notification Adapter Settings

1 In the Admin Settings window, click the Notification Adapter tab.



2 Use the following table to determine your next step:

If you are using this back-end database	21 · · · · · · · · · · · · · · · · · · ·	
ServiceCenter	sc	
OAA Repository	rome	

This is the target configuration for which this target is as an alias.

3 Click Save.

The Control Panel appears, displaying the following message:

The settings have been saved. To ensure all changes take effect, you must reset the Peregrine Portal server.

4 Click Reset Server.

The following message appears:

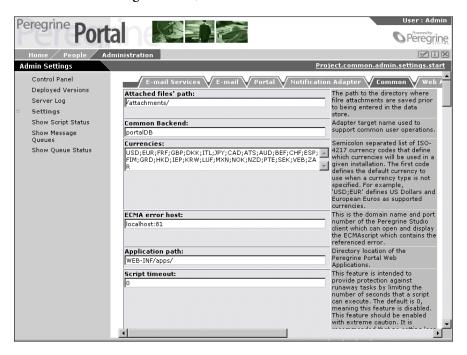
The Archway servlet and its Adapter connections have been reset successfully. You have configured the settings on the Notification Adapter tab of the **Admin Settings** window.

Configuring the Common Settings

The Common tab is used to specify the path for attachment files, enable script polling, and to specify the URL for the Peregrine Portal server.

To enable polling and to specify the URL for the Peregrine Portal server:

1 In the Admin Settings window, click the Common tab.



- 2 In the Attached files' path box, accept the default path to the directory that is used to store all uploaded attachment files sent with notifications.
- 3 Scroll down to the Enable Script pollers box, and then click Yes to enable script pollers to execute.
 - When this is enabled, scripts that are registered in scriptpoller.ini files are executed on a recurring basis.
- **4** Scroll down to the **Server URL** box, and then type the URL for the Peregrine Portal server.
 - This must be set up in order for the Notification Services hypertext link in each e-mail notification generated by Notification Services to work. Users can click this link to open the **Incoming Notification Details** window and see the details for the current notification.
- 5 Click Save.

The Control Panel window appears, displaying the following message:

The settings have been saved. To ensure all changes take effect, you must reset the Peregrine Portal server.

6 Click Reset Server.

The following message appears:

The Archway servlet and its Adapter connections have been reset successfully.

You have configured the settings on the Common tab of the Admin Settings window.

Configuring the Web Application Settings

To configure the Web Application settings:

1 In the Admin Settings window, click the Web Application tab.



- 2 In the Alias for box, type the target configuration for which this target is an alias, either rome for OAA or sc for ServiceCenter.
- 3 Click Save.

The Control Panel window appears, displaying the following message:

The settings have been saved. To ensure all changes take effect, you must reset the Peregrine Portal server.

4 Click Reset Server.

The following message appears:

The Archway servlet and its Adapter connections have been reset successfully.

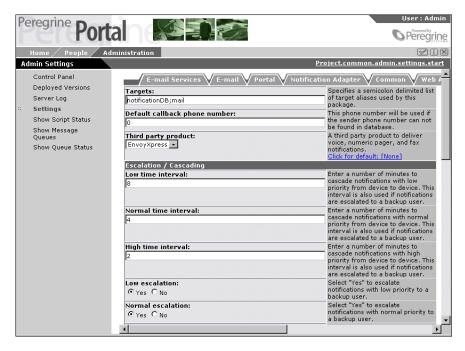
You have configured the settings on the Web Application tab of the Admin Settings window.

Configuring the Notification Services Settings

The Notification Services tab of the Admin Settings window has general settings followed by sections for Escalation/Cascading, EnvoyXpress, and TelAlert settings.

Configuring General Settings

1 In the Admin Settings window, click the Notification Services tab.



Note: This tab is located at the top right of the **Admin Settings** window. You may need to scroll to the right to see the tab.

- 2 In the Targets box, leave the default unchanged. This is a semicolon-delimited list of target aliases used by this package.
 - Your general Notification Services settings on the **Notification Services** tab are complete. Continue with the next step.
- 3 In the Default callback phone number box, type the phone number to use if the sender's phone number cannot be found in the database.
- 4 In the Third party product list, select one of the following:
 - The appropriate third-party product (**TelAlert** or **EnvoyXpress**) if you plan used to deliver voice, numeric pager, and fax notifications.

- None if you do not plan to use voice, numeric pager, or fax for delivering notifications.
- **5** Continue to the next procedure.

Configuring Escalation/Cascading Settings

- 1 In the Low time interval box, type the number of minutes to wait for a reply from recipients before cascading notifications with low priority from device to device. This interval is also used when notifications containing a confirmation question are escalated to a backup user (assuming that cascading already took place, if cascading was triggered).
- 2 In the Normal time interval box, type the number of minutes to wait for a reply from recipients before cascading notifications with normal priority from device to device. This interval is also used when a notification containing a confirmation question is escalated to a backup user (assuming that cascading already took place, if cascading was triggered).
- 3 In the High time interval box, type the number of minutes to wait for a reply from recipients before cascading notifications with high priority from device to device. This interval is also used when notifications containing a confirmation question are escalated to a backup user (assuming that cascading already took place, if cascading was triggered).
- 4 In the Low escalation box, do one of the following:
 - Click Yes to escalate notifications with low priority to a backup user.
 - Click **No** to prevent escalating low priority notifications to a backup user.
- 5 In the Normal escalation box, do one of the following:
 - Click Yes to escalate notifications with normal priority to a backup user.
 - Click No to prevent escalating normal priority notifications to a backup user.
- 6 In the High escalation box, do one of the following:
 - Click Yes to escalate notifications with high priority to a backup user.
 - Click **No** to prevent escalating high priority notifications to a backup user.

Your escalation and cascading settings are set up.

7 Use this table to determine your next step:

Are you going to use	Then
voice messaging, text	
pagers, or fax?	

Yes	Scroll down to the section that corresponds with your service provider (either EnvoyXpress or TelAlert).
No	Scroll to the bottom of this window, and click Save . Your settings are saved, and the Control Panel window appears.
	Click Reset Server to reset the Peregrine Portal server and all of its connections.
	Skip the next two procedures (Configuring EnvoyXpress Settings on page 66 and Configuring TelAlert Settings on page 67). Go to the procedure for Configuring Notification Devices on page 68.

Configuring EnvoyXpress Settings

- 1 In the URL box, type the URL for the EnvoyExpress web service.
- 2 In the User ID box, type the user name used to connect to the EnvoyXpress web service.
- **3** In the **User password** box, type the user password used to connect to the EnvoyXpress web service.
- **4** In the **OEM user ID** box, type the OEM user name used to connect to the EnvoyXpress web service.
- 5 In the OEM user password box, type the OEM user password used to connect to the EnvoyXpress web service.
- **6** In the **Domain** box, type the domain used to connect to the EnvoyXpress web service.
- 7 Scroll to the bottom of this window, and click Save.
 Your EnvoyXpress settings are saved, and the Control Panel window appears.
- 8 Click Reset Server to reset the Peregrine Portal server and all of its connections.
 - You have completed the settings on the **Notification Services** tab of the **Admin Settings** window.

9 Skip the next procedure (*Configuring TelAlert Settings*), and go to the subsequent procedure (Configuring Notification Devices).

Configuring TelAlert Settings

- 1 In the Hosts box, type the TelAlert host names, separated by semicolons.
- 2 In the Response configuration box, type the response configuration name used to prompt for replies.
- 3 In the Connect attempts box, type the number of attempts to connect to the Telalert server before giving up.
- 4 In the Connect timer box, type the number of seconds to wait for the connection to be made.
- 5 In the Connect pause box, type the number of seconds for the TelAlert server to wait before attempting to connect again.
- 6 In the Connect wait time box, type the number of seconds to wait for a response after the connection is made.
- 7 In the Acknowledgement wait time box, type the amount of time and unit of time to wait for acknowledgement reply. Time units are s for seconds, m for minutes, or h for hours. For example, 59s indicates 59 seconds.
 - **Note:** If this value is set too high, errors may occur because the message could clear before the Acknowledgement wait time elapses.
- 8 In the User box, type the user name used to connect to the TelAlert server.
- **9** In the Password box, type the user password used to connect to the TelAlert server.
- 10 In the Voice configuration box, type the user password used to connect to the TelAlert server.
- 11 In the Interactive voice configuration box, type the configuration name for interactive voice alerts.
- 12 In the Fax configuration box, type the configuration name for fax alerts.
- 13 Press Save.
 - The Control Panel window appears.
- 14 Click Reset Server to reset the Peregrine Portal server and all of its connections.
 - You have completed the settings on the Notification Services tab of the Admin Settings window.

Configuring Notification Devices

As an administrator, you need to configure the devices used to transmit notifications for each user. After you set up the devices for a user, the user sees these devices displayed as preference options on the following windows in Notification Services: Work Hours Preferences, Off Hours Preferences, and Extended Out Preferences.

Configuring Devices in ServiceCenter

To configure notification devices in ServiceCenter:

- 1 Log in to ServiceCenter as an administrator.
- 2 Click the Support tab, and then click Contacts.
 - The CONTACT INFORMATION window appears.
- 3 Use the Contact Name, Employee ID, Last Name, and First Name boxes to look up the user whose devices you're going to configure.
- 4 Click Search.
 - The contact information is displayed.
- 5 Select the contact record you want to update.
 - The corresponding contact information is displayed in the CONTACT INFORMATION window.
- **6** On the Business Information tab, in the Email box, verify or type the user's e-mail address.
- 7 Click the Contact Numbers tab.
 - You will be checking and updating fields in the Phone and Pager Information areas on this tab.
- 8 Use the following table to see the text boxes in ServiceCenter that are mapped to the devices you want to set up for this user in Notification Services. Verify or type values in the following boxes:

Device in Notification Services	Text box in SC	
Fax	Fax	
Work Phone	Work	
Home Phone	Home	
SMS Device	Car	
Portable Phone	Portable	

Device in Notification Services	Text box in SC
Numeric Pager	Number
	PIN
	Type
Text Pager	Name

- 9 If you are setting up fax as a device for this user, verify or type the fax number.
- 10 Click Save.

You have set up the devices for this user.

11 Repeat this procedure for each user.

You have configured devices in ServiceCenter for transmitting notifications in Notification Services.

Configuring Devices in the OAA Repository

To configure notification devices in the Peregrine OAA Repository:

- 1 Log in to the Peregrine Portal as an administrator.
- 2 Click People.

The Person Search window appears.

The **oaa.people.manage** security role is required for an administrator to have access to the **People** module in the Peregrine OAA Portal.

3 Use the search fields to locate the user whose devices you want to configure, and then click **Search**.

The Person Search Results window appears.

4 Select the user's record in the search results.

The Person Details window appears.

5 Under Phones, click Add.

The Add New Person Phone window appears.

6 In the Phone Type list, choose the phone type for the first device you want to set up for this user. Use the following table to see the device mappings between OAA and Notification Services so you will know which phone type to use for each device you want to set up.

Device in Notification Services	Phone type in OAA
Fax	WorkFax
Work Phone	WorkPhone
Home Phone	HomePhone
Portable Phone	CellPhone
Numeric Pager	NumericPager
	Pager Pin: PIN
	Pager Type: Type

Note: If you select **NumericPager** from the **Phone Type** list, you need to use the **Pager Pin** and **Pager Type** boxes below the **Phone Type** box to type in the PIN and Type. Refer to the third-party product documentation for either TelAlert or EnvoyXpress for valid pager types.

- 7 After typing the information for the first phone type, click Add Item. The Person Details window appears.
- **8** Repeat steps 5 through 7 for each phone device for this user.

Note: By default, the pager pin and pager type boxes are not available on the **Add New Person Phone** window. To make these fields visible, use the **Personalize this page** icon.

9 Under Emails, click Add.

The Add New Person Email window appears.

10 In the Email Type box, select the e-mail type.

Use the following table to see the mappings between Email Types in OAA and devices in Notification Services so you will know which Email Types to set up here.

Device in Notification Services	Email Type in OAA
E-mail	Primary

SMS Device	SMS
Text Pager	TextPager

- 11 In the Email box, type the corresponding e-mail address, and then click Add Item.
- 12 Repeat steps 9 through 11 for each e-mail device.
- 13 When you are finished adding e-mail devices for this user, click Submit. All the device information (phone and e-mail) you entered is saved for this user.
- 14 Repeat this procedure to set up devices and e-mail for each user. You have configured devices for transmitting notifications in Notification Services.
 - If you have completed all of the procedures in this chapter, you have completed the Notification Services configuration.

Making API Calls

This appendix presents a set of principal methods developers can use to create and manage notifications using Notification Services.

Notification Services provides a simple API for sending, deleting, and retrieving notifications. An API call is invoked by creating an XML document describing the API call, which is then sent to the Notification Services server via an HTTP POST request. An XML document is returned that includes the requested information.

This appendix includes sections for the following topics:

- Making an API Call.
- Determining the Notification Services URL.
- API Methods.
- Schemas (including a description of each field).

Making an API Call

In order to invoke an API method, your application needs to send a Request XML document to the Notification Services URL using an HTTP POST request. The HTTP POST request should include a basic authentication field in the request header. A valid Peregrine Portal user name and password should be used in the authentication field. For more information on the basic authentication scheme, refer to the W3C HTTP specification for HTTP user authentication, RFC 2617:HTTP Authentication: Basic and Digest Access Authentication.

Example of a Request XML Document

The following Request document would return the Notification document where the ID equals 12345.

To produce the required URL for sending HTTP POST requests, see *Determining the Notification Services URL*. For a description of the Request document and other XML documents used in requests, see *Schemas* on page 78.

The **Operation** field specifies which API method will be invoked on the server. Currently, Notification Services supports the following methods:

- sendNotification
- deleteNotification
- getNotification

For a detailed description of each method, see API Methods on page 75.

Along with the **Operation** field, a Notification document should be included in the required with the required fields. For descriptions of the required fields for each method, see *API Methods*.

Determining the Notification Services URL

A URL is required for sending the HTTP POST to Notification Services.

To determine the Notification Services URL:

■ Examine the URL used to access the Peregrine Portal and replace login.jsp with archway?sendHttpRequest.

Example:

The URL for the Peregrine Portal is http://localhost/oaa/login.jsp. Replace login.jsp with archway?notification.sendHttpRequest.

The Notification Services URL is

http://localhost/oaa/archway?notification.sendHttpRequest.

This is the URL used to invoke API calls in Notification Services.

API Methods

This section describes each of the currently supported notification methods and their required fields.

sendNotification

Submit a notification for delivery. If valid, the notification is placed in the delivery queue.

Required Fields/Documents

SenderId, Subject, Text, Priority, Recipients

Returns

An updated version of the Notification document is returned. The **Status** and **Error** fields can be used to determine whether the notification was valid. If the notification was valid, the value in the **Status** field is **Waiting**. If the notification was invalid, the value in the **Status** field is **Failed**, and the cause for failure is explained in the **Error** field.

Notification State	Field Values
Successful	Status= Waiting
Failed	Status=Failed Error= <cause failure="" of=""></cause>

Notes

The <Text> tag in the Notification schema can contain an HTML document. For a complete description, see *Schemas*.

Use the <EmailAddress> tag of the Recipient document to send a notification to a user whose contact record is not in the back-end database.

Example

Send a notification from mkellem to jspires and xxue.

Request Document

```
</Recipients>
      </Notification>
</Request>
Return Document
<?xml version="1.0"?>
<Notification>
  <ld>12345</ld>
  <SenderId>mkellem</SenderId>
  <Subject>Test Notification</Subject>
  <Text> This notification was sent using the sendNotification API call</Text>
  <Priority>normal</Priority>
  <Recipients>
       <!-- Removed. Recipient information will be expanded. -- >
  </Recipients>
  <Status>Waiting</Status>
  <! -- See the schema definition for a complete list of returned fields. -- >
</Notification>
```

getNotification

Retrieve the contents of a notification, including the collection of Recipients.

Required Fields

Id

Returns

A full notification document.

Example

Retrieve Notification 12345.

Request Document

</Request>

deleteNotification

Remove a notification from the back-end database. After the notification is removed, all processing of the notification stop.s

Required Fields

Id

Returns

The full contents of the notification.

Example

Remove notification 12345 from the back-end database.

Request Document

Schemas

This section defines each schema referenced in this appendix.

Request

```
<Request>
<Operation/>
<Notification/>
```

</Request>

Element	Description	
Operation	The operation being performed. Valid operations are sendNotification, getNotification, and deleteNotification.	
Notification	A notification document. For required fields see <i>API Methods</i> on page 75.	

Notification

- <Notification>
 - <Id/>
 - <BaseId/>
 - < SenderId/>
 - < SenderName/>
 - < SenderAddress/>
 - < Subject/>
 - < Text/>
 - < URL/>
 - < BusObjName/>
 - < BusObjId/>
- < Status/>
- < TimeStamp/>
- < Method/>
- < Question/>
- < Priority/>
- < ReplyTo/>
- < ExpirationDate/>
- <Origin/>
- <OriginId/>
- < RecipientCount/>
- < RecipientAnswerCount/>
- < Error/>
- < Attachments/>
- < Recipients>
- < Recipient >
 - <RecipientId/>
- </Recipient>
- </Recipients>

<Groups>
<GroupId/>
<GroupId/>
...
</Group>
</Notification>

Field Descriptions

Use the following table to see elements and field descriptions. The Field Type column indicates G for generated fields, U for user input fields, and B for fields that are both generated and user input.

Element	Field Type	Description
Id	G	Unique ID
BaseId	G	If the notification is forwarded, this is the original notification ID.
SenderID	U	The unique ID of the sender in the back-end database. With ServiceCenter as the back-end database, you need to supply the user's contact record.
SenderName	U	The full name of the sender.
SenderAddress	U	The sender's address. This field is the e-mail address for all e-mail notifications. It is the sender's Work Phone number for numeric pager notifications.
Subject	U	The subject of the notification.
Text	U	The main body of the notification. You can optionally add an HTML document to this tag. For details, see <i>HTML Notifications</i> on page 83 in this section.
URL	В	A URL to embed into the notification. This is the URL for the Notification Services inbox.
Status	G	The current status of the notification.
TimeStamp	G	Date and time when the notification was created.
Method	U	Delivery method. For recipients whose ids are set to unknown, the method is ignored because the e-mail method is always used. For a list of methods, see <i>Valid Methods</i> on page 82 in this section.
Question	U	Confirmation question for the recipients.
Priority	В	Priority of the notification. Valid settings are low, normal, and high. Normal is the default value.
ReplyTo	В	The address the sender should reply to. Unless specified by the sender, the default is the setting in the administration page.

Element	Field Type	Description
Error	G	Any errors that occurred while the notification was being processed.
Attachments	G	The file names of all attachments sent with the notification.
Recipients	U	A collection of recipient documents. For details, see <i>Recipient</i> on page 83. With ServiceCenter as the back-end database, you need only supply the recipient's contact name. With the OAA Repository as the back-end database, you should specify the unique ID of the recipient. The collection of Recipients will look similar to the following:
		<recipients></recipients>
		<recipient></recipient>
		<recipientid></recipientid>
		<recipient></recipient>
		<recipientid></recipientid>
-		
Groups	U	A collection of group IDs that will receive the notification. Currently only ServiceCenter groups are supported. The assignment, ocmgroups, and cm3groups tables are queried, and each matching group is expanded into a collection of recipients. The collection of Groups will look similar to the following:
		<groups></groups>
		<groupid></groupid>
		<groupid></groupid>
		<groupid></groupid>
ExpirationDate	В	The number of days until the notification is deleted. If set to -1 (the default), the notification never expires. If the integrating applications does not provide a value, the value specified in Admin Settings is used.
Origin	U	The application that created this notification.
OriginId	U	The unique ID of the request given by the origin application.
RecipientCount	G	Number of recipients.
RecipientAnswerCoun t	G	Number of recipients to answer. This value is -1 for notifications without a confirmation question.

Element	Field Type	Description
BusObjName	U	Name of the object to embed. Use this along with BusObjId to store a reference to an object for your application. Not used by Notification Services. These values will be passed back to the sending application when a response to the notification is received.
BusObjId	U	ID of the embedded object.

Valid Methods

Use the following table to see the methods (devices) for sending notifications. These are the valid values for the Method field. For recipients whose ids are set to unknown, the method is ignored because the e-mail method is always used.

Value	Description
default	Send notifications to each recipient's preferred device. This method should be used unless you need to always send to a specific device, such as e-mail. If the basic version of Notification Services (E-Mail Service Within OAA) is installed, this method always sends an e-mail because this is the only device supported in that version of the application. For recipients whose ids are set to unknown, this default is ignored because the e-mail method is used.
email	E-mail
workphone	Work phone
mobilephone	Mobile phone
homephone	Home phone
textpager	Alphanumeric pager
numericpager	Numeric pager
fax	Fax
smsdevice	SMS device

HTML Notifications

Optionally, you can send an HTML form for e-mail notifications. In order to do this, you need to wrap your HTML in a <notificationHtml> tag. When supplying the <notificationHtml> tag, you should also supply a <notificationPlainText> tag for devices that do not support HTML. If the user's e-mail client does not support HTML, the text in the <notificationPlainText> tag will be displayed.

For example, the following Notification will send a user-defined HTML document.

Recipient

```
< Recipient>
  < Id/>
  < RecipientId/>
  < NotificationId/>
  <EmailAddress>
  < Status/>
  <Answer/>
  <CurrentMethod/>
  <PreviousMethods/>
  <Error/>
</Recipient>
```

Field Descriptions

Field	Description	
Id	Unique ID	
RecipientId	Recipient's user ID. Set this to "_unknown" when you are using the EmailAddress field.	
NotificationId	Notification that created this recipient object.	
Status	Current status of the recipient object.	
Answer	Recipient's answer to the question in the notification.	
CurrentMethod	Current method being used.	
PreviousMethods	Methods that have already been tried, separated by commas(,). This field is updated with the old value of CurrentMethod each time a notification is cascaded to a recipient's next device.	
EmailAddress	E-mail address of a contact not in the back-end database. Use this field to send a notification to any e-mail address. The RecipientId field should be set to "_unknown" when you use this field. For a more detailed description, see <i>Sending a Notification to any E-mail Address</i> in this section.	

Sending a Notification to any E-mail Address

The EmailAddress field enables you to send a notification to any e-mail address. You should use this field when using the sendNotification method. Here is an example of a collection of Recipients document that will send the notification to john.doe@company.com and jane.doe@company.com.

Configuring the E-Mail Service Within OAA

This appendix is written solely for administrators of the E-mail Service Within OAA product. This version of the product supports e-mail as the only device for sending notifications. It does not support cascading to users' device preferences or escalation to a backup user.

This appendix provides a map of all the tasks for configuring the E-mail Service Within OAA. The tasks that this appendix refers to are a subset of the configuration tasks for Notification Services 2.2. Rather than repeating the tasks that are common to both products, this appendix provides a road map to the administration tasks in Chapter 4. Use this appendix to determine which tasks in Chapter 4 you need to perform to configure the E-Mail Service Within OAA.

To configure the E-Mail Service Within OAA:

- 1 Complete all of the tasks in Chapter 4 through step 2 on page 55, *Gather this* information about your outbound e-mail server:.
- 2 Skip the remaining steps in that procedure for gathering information about service providers, and go to the next procedure, Logging in as an Administrator on page 57.
- **3** Complete each procedure through Configuring the Web Application Settings on page 63.
- **4** Skip the procedure for *Configuring the Notification Services Settings* on page 64.

5 Use this table to determine your next step.

If you are using this back-end database	Then
ServiceCenter	Go to the procedure for <i>Configuring Notification Devices</i> on page 68. Complete this procedure through step 6.
	You have configured e-mail as the device for transmitting notifications in the E-mail Service Within OAA. You have also completed configuring this product. Skip the remaining steps in this procedure.
The OAA Repository	Skip this procedure and go to Configuring Devices in the OAA Repository on page 69.

- 6 In step 10, the only e-mail device you need to set up is the first one mentioned: E-mail in Notification Services, which is mapped to Primary as the Email type in OAA.
- 7 Skip to step 13, and complete that step and the rest of the procedure. You have configured e-mail as the device for transmitting notifications in the E-mail Service Within OAA. You have also completed configuring this product.

Glossary

This glossary defines terms and explains concepts used in conjunction with Notification Services.

activity—A task performed using a Peregrine application.

Admin Settings window—The window in the Peregrine Portal that is used by the Notification Services administrator to configure and maintain applications, including Notification Services.

attachments—File attachments that can be viewed for incoming notifications or notifications you have sent.

back-end database—All notifications that are transmitted by Notification Services are stored in the back-end database (either ServiceCenter or the OAA Repository). The back-end database is also used to retrieve contact information and the devices that are set up for that contact and to store user preferences.

backup user—The backup user receives a notification sent to you if a notification that includes a confirmation question is cascaded (sent) to all of your preferred devices and no reply is received by the sender within the specified time interval. This time interval is established by the Notification Services administrator for each notification priority. When there are no more preferred devices for cascading, escalation occurs, and the notification is sent to your backup user. Escalation to a backup user occurs only for notifications that include a confirmation question. In contrast with cascading, which occurs only if the notification is sent using the default device, escalation to a backup user occurs regardless of the device used to send the notification. In other words, escalation occurs even if the sender selects a specific device for sending the notification rather than selecting default. When a notification is sent to your backup user, you receive a copy of it in your inbox, with the status indicated as escalated.

bizdoc adapter—The mail adapter that is used in Notification Services when the OAA Repository is used as the back-end database.

cascading —Cascading refers to sending a notification to each preferred device for a recipient in the order of preference. Cascading occurs only for notifications sent using **Default** as the device. The inclusion or lack of a confirmation question does not affect cascading. Cascading is triggered when a device does not return a **completed** status within the specified time interval established by the Notification Services administrator for each notification priority. For example, when Notification Services attempts to deliver a phone message to a phone that is busy, the phone does not return a completed status. If this continues for the specified interval, the notification is cascaded to the recipient's next device preference.

Cascading is followed by escalation in certain situations. If a notification that includes a confirmation question is cascaded to all the recipient's preferred devices and no reply is received by the sender within the specified time interval, the notification is then escalated to a backup user. Cascading always occurs *before* escalation if both processes occur.

Check Incoming Notifications window—The window used to see a list of incoming notifications, including summary and status information.

Check Outgoing Notifications window—The window used to see summary information and status for an outgoing notification.

- Common tab —A tab on the Admin Settings window of the Peregrine Portal. It is used by the Notification Services administrator to enable script polling, to specify the URL for the Peregrine Portal server, and to specify the path for attachment files.
- Control Panel —The window in the Admin Settings options that shows the status for connections between targets and mail adapters for adapters registered in the server. The Notification Services administrator uses this window to check connection status and to reset the Peregrine Portal server.
- confirmation question —A question from the sender of a notification, phrased so that the recipient can answer yes or no. The reply must be either yes, no, or left blank. When you are sending a notification, including a confirmation question is important because an unanswered question is what causes a notification to be escalated to a backup user if no reply is received after the notification has been cascaded to all of the intended recipient's preferred devices. Always include a confirmation question if you want a notification to be escalated to a backup when a reply is not received from the initial recipient.
- **connection status**—On the Notification Services **Control Panel**, this indicates whether each target and its associated adapter is connected.
- current notifications—All the notifications that have not been deleted and that have not reached the expiration date. The expiration interval is established by the Notification Services administrator for all notifications on your system. By default, notifications are set not to expire. You cannot override this expiration date when you send a notification.
- default device—When you are sending a notification, you can specify any of the devices that are configured for a recipient, or for all of the members of a group or you can select Default as the device. When you select Default, the notification is sent to the recipient's preferred device (as defined in user preferences) for the time period and notification priority. Selecting Default as the device increases the chances that the recipient will receive and respond to the notification quickly. Another reason for using Default is that cascading to a recipient's device preferences occurs only when the notification is sent using Default as the device.

device—The instrument used to receive a notification from Notification Services. The following devices are supported: e-mail, fax, home phone, numeric pager, portable phone, SMS device, text pager, and work phone. See also *default device*.

device preferences —See Preferences.

E-mail tab — A tab on the Admin Settings window of the Peregrine Portal. It is used by the Notification Services administrator to configure the inbound and outbound e-mail servers.

E-mail Services tab— A tab on the Admin settings window of the Peregrine Portal. It is used by the Notification Services administrator to configure the expiration for notifications, to specify the prefix for the log file name, to turn debugging on and off, and to specify targets. This tab is used to configure both Notification Services 2.2 and the basic product, E-Mail Service Within OAA, which supports e-mail as the only device for sending notifications.

Employee Lookup window — A window that is accessible from the Schedule window. The Employee Lookup window enables browsing to choose a backup user. This lookup is case sensitive when ServiceCenter is used as the back-end database. It is not case sensitive when the OAA Repository is used as the back-end database.

escalation —Escalation occurs when a confirmation question is included in a notification and no reply is received in a certain time interval. This time interval is established by your Notification Services administrator for each notification priority. The time before a notification is escalated to your backup user typically varies for low, normal, and high priority notifications. Before escalation occurs, a notification is cascaded to all of the initial recipient's preferred devices. In contrast with cascading, which occurs only if the notification is sent using the default device, escalation to a backup user occurs regardless of the device used to send the notification. In other words, escalation occurs even if the sender selects a specific device for sending the notification rather than selecting Default.

EnvoyWorldWide —The third-party vendor for the EnvoyXpress message service product which can be used to deliver a Notification Services notification to phones, cell phones, pagers, and fax machines.

- EnvoyXpress —A message service used to deliver a Notification Services notification to phones, cell phones, pagers, and fax machines. The third-party vendor for this product is Envoy WorldWide.
- expiration —The interval between the time when a notification is sent and the time when it is automatically deleted from the recipient's Notification Services inbox and from the sender's Notification Services outbox. This interval is determined by the Notification Services administrator. The default is set to never expire.
- extended out —A user preference in Notification Services that users turn on when they are out of the office for an extended period. Users can specify device preferences for notification delivery during extended out periods, using the Extended Out Preferences window. These preferences can vary by notification priority (low, normal, and high). Users need to clear this check box when they return after being out of the office for an extended period.
- group—The recipient for a notification can be an individual or a group. Sending notifications to groups is supported if your back-end database is ServiceCenter. This is not supported if the OAA Repository is used as the back-end database
- HTML form—A form that is used for e-mail notifications delivered by Notification Services when the recipient's e-mail application supports HTML formatting for messages. The form includes a link to a URL that users can click to open the **Incoming Notification Details** window, showing the details for the current notification.
- IMAP —A mail protocol that OAA supports. OAA can support communicating with inbound e-mail servers that use the IMAP protocol or the POP3 protocol.
- inbox —See Notification Services inbox.
- Incoming Notification Details window—The window used to read a notification and see related details. If the sender asked a confirmation question, the question appears here. If the notification includes an attachment, it can be viewed from this window.

- interactive voice alert—Notifications sent by voice over the phone that enable the recipient to reply to a confirmation question using the same phone. After the notification is delivered verbally, the recipient uses a menu to respond.
- mail adapter —A component of used to deliver e-mail notifications. When ServiceCenter is used as the back-end database, this is the sc mail adapter. When the OAA Repository is used as the back-end database, this is the bizdoc mail adapter.
- notification —An informational notice or message from a sender to a recipient, multiple individual recipients, or a group of recipients. A notification may or may not contain a confirmation question, requesting a yes/no reply from the recipient.
- Notification Adapter tab —A tab on the Admin Settings window of the Peregrine Portal. It is used by the Notification Services administrator to specify the alias for the back-end database used in Notification Services.
- **notification priority**—The priority for a notification that is determined by the sender (either low, normal, or high). The priority is one of the factors that determines the device used to send a notification, based on the recipient's preferences. Users can specify devices by notification priority.
- Notification Services inbox—The inbox where users can check for incoming notifications and view summary status information about these notifications. A copy of each notification is always sent to the recipient's inbox in addition to being sent to the preferred device.
- Notification Services outbox—The outbox where users can see the status of outgoing notifications and view summary information about these notifications. The outbox can also be used to delete outgoing notifications.
- Notification Services tab—A tab on the Admin Settings window of the Peregrine Portal. It is used by the Notification Services administrator to configure the general Notification Services settings, escalation/cascading settings, and settings for third-party message service providers.
- OAA—See Peregrine Open Application Architecture.

- OAA Repository—A database interface that runs on top of standard DBMSs, for example, Oracle. Notification Services supports the OAA Repository as a back-end database for Notification Services. All notifications that are transmitted by Notification Services are stored in the back-end database. The back-end database is also used to retrieve contact information and the devices that are set up for that contact and to store user preferences.
- off hours—A period indicated by Notification Services users when they are out of the office on a scheduled work day. Users can specify device preferences for notification delivery during off hours, using the Off Hours Preferences window. These preferences can vary by notification priority (low, normal, and high).
- Outgoing Notification Details window—The window used to see detailed information and status for an outgoing notification. If you asked a confirmation question, the question appears here. If the notification includes attachments, they can be viewed from this window. Outgoing notifications can be deleted from this window.
- Peregrine OAA—See Peregrine Open Application Architecture
- Peregrine Open Application Architecture—The Peregrine application development and integration platform. This architecture was formerly known as Get-It Base.
- Peregrine Portal —The screen within the Peregrine Open Application Architecture used to access individual Peregrine applications.
- polling—See Script polling.
- POP3 —A mail protocol that OAA supports. OAA can support communicating with inbound e-mail servers that use the POP3 protocol or the IMAP protocol.

preferences — user-defined preferences that specify which devices should be used within Notification Services to deliver notifications to them, based on a work schedule they create. This work schedule designates work days and includes check boxes that users select to indicate that they are out of the office for an extended period. It also includes a check box that users can select to indicate that they are unavailable for notifications. After setting up their work schedules, users set up their device preferences for work hours, off hours, and extended out periods.

Device preferences can be specified for three levels of notification priority (low, normal, and high). Users can designate preferences only for the devices that have been configured for them, up to a maximum of eight devices. They can also specify that a certain device never be used to send notifications for a given time period or notification priority. When the sender uses **Default** as the device to send a notification, the recipient's device preferences are implemented. If a user specifies preferences, skipping preference numbers, the preferred devices are still used in sequence. For example, if a user sets preferences 1 and 3 but not preference 2, preference 1 is used first, then preference 3. This prevents problems when users remove devices from their preferences without renumbering the remaining devices.

priority —See Notification priority.

question —See Confirmation question.

recipient—The intended receiver of a notification. The recipient can be an individual, multiple individuals, or a group.

replies—In the Notification Services inbox, this is the number of replies received to confirmation questions you asked, expressed as a fraction of the number of replies expected from all recipients for a given notification. For example, 0/1 indicates that no replies have been received and that one reply is expected.

rome—In the Administration Settings, rome is the alias for the OAA Repository. This alias corresponds to the bizdoc mail adapter. On the Admin Settings window, rome is a tab that Notification Services administrators use to set up the user name, password, and URL for the Oracle database when the OAA Repository is used as the back-end database for Notification Services.

- sc —In the Administration Settings, sc is the alias for the ServiceCenter database. This alias corresponds to the sc mail adapter.
- sc mail adapter—The mail adapter that is used in Notification Services when ServiceCenter is used as the back-end database.
- script polling—Script polling is required for notifications to be delivered. It runs the delivery engine every minute, delivering new notifications and updating the status of existing notifications. Script polling is enabled by the Notification Services administrator on the Common tab of the Admin Settings window.
- Send Notification window—The window used to create, address, and send a notification. This window also enables attaching documents to a notification and viewing the attachments.
- ServiceCenter database—A back-end database supported by Notification Services. All notifications that are transmitted by Notification Services are stored in the back-end database. The back-end database is also used to retrieve contact information and the devices that are set up for that contact and to store user preferences.
- Short Message Service—(SMS) A protocol used in cell phone text messaging. Notification Services uses this SMS protocol for notifications sent through third-party message service providers.
- SMS—See Short Message Service.
- TelAlert—A message service used to deliver a Notification Services notification to phones, cell phones, pagers, and fax machines. The third-party vendor for this product is Telamon.
- Telamon—The third-party vendor for the TelAlert product which can be used to deliver a Notification Services notification to phones, cell phones, pagers, and fax machines.
- time zone—The time zone specified by users for their work schedules.
- unavailable for notifications—Users can indicate that they are unavailable for receiving notifications. In this case, the user receives a copy of notifications in the Notification Services inbox and notifications are sent immediately to the backup user, if one is specified.

- voice alert—A voice alert sends a text message by voice over the phone. Unlike interactive voice alerts, these alerts do not enable the recipient to reply using the phone that delivered the message.
- Web Application tab—A tab on the Admin Settings window of the Peregrine Portal. It is used by the Notification Services administrator to specify the alias for the back-end database.
- Welcome window—The window in the Peregrine Portal that appears after you log in.
- work hours—A period indicated by Notification Services users when they are working on scheduled work days. Users can specify device preferences for notification delivery during work hours, using the Work Hours Preferences window. These preferences can vary by notification priority (low, normal, and high).
- work schedule—A schedule that users specify, indicating their work hours and off hours. There is a check box on the Schedule window that users select to indicate that they are out of the office for an extended period and a check box to indicate that they are unavailable to receive notifications. Notification Services uses the work schedule in conjunction with a user's device preferences to determine the device to use when a sender specifies the default device in a notification.

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