# Get-Answers 4.1.2 Administration Guide

For Windows 2000, AIX, or Solaris



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# **About this Guide**

Get-Answers is a Web-based, knowledge management application that enables you to capture and store knowledge in a database, and to search for that knowledge when you need it. Using Get-Answers, you can improve the quality and accuracy of the knowledge that people in your company use to get their jobs done, and help them to avoid calls to the help desk.

The Administration Guide explains concepts and provides step-by-step instructions for configuring and administering Get-Answers.

Get-Answers uses the Peregrine Open Application Architecture (OAA) Platform, a software platform that provides common features and functions to Peregrine products such as Get-Answers, Get-Services, and Get-Resources. You run these products on the 4.1.2 version of the Peregrine OAA Platform; however, the OAA platform is included with these products and not sold separately from them.

# **Book audience**

The *Administration Guide* was written for Get-Answers administrators. To use this guide most effectively, you need to have knowledge of the following:

- Your organization's process for performing software installations, and your responsibilities within that process
- Peregrine products that have been previously installed
- Your system architecture
- Your operating system user interface
- Configuring and maintaining local area networks (LANs)
- System administration tasks in your environment
- System administration tasks for associated back-end products

## **Related documentation**

As you use Get-Answers, you can refer to this related documentation:

- The *Get-Answers Release Notes* provide information about new features, corrected issues, and known issues. This document is delivered in print format.
- Get-Answers Installation Guide provides information about installing Get-Answers and the Peregrine® Open Application Architecture (OAA) platform; installing the Get-Answers Search Engine; setting up your Web server and application servers; creating the Get-Answers database; and populating that database with sample data. This document is delivered in print format.
- *Get-Answers User's Guide* provides information about searching the Get-Answers document collection, working with documents, authoring new documents, and generating reports. This book is delivered on the Get-Answers CD.
- Notification Services Quick Start Guide explains the concepts, provides step-by-step instructions, and describes the tasks that you can perform using Notification Services. It also provides information on configuring and administering Notification Services. Notification services works with other Peregrine applications to enable users to send and receive notifications of events.

# **Associated applications**

You can integrate Get-Answers with Peregrine's ServiceCenter, and the Get-Answers Installation Guide describes how to do this. However, this Get-Answers Administration Guide does not contain specific product information about other applications that can be used with Get-Answers, including ServiceCenter. If you integrate Get-Answers with ServiceCenter, refer to that product's documentation.

**Note:** If you are integrating Get-Answers with ServiceCenter, it must be installed and configured before you install Get-Answers.

# **Typographical conventions**

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

Convention	Meaning
Sans serif	Information that you must type exactly as shown, code examples, output, and system messages appear in a sans serif font.
Bold	Button names, field names, menu names, and menu options appear in <b>bold</b> .
Italics	Variables and values that you must provide appear in <i>italics</i> . New terms also appear in <i>italics</i> .

# **Special elements**

This book uses special elements to help you locate information, as shown in the following table:

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

Element	Usage
Tip:	Information that can make a task easier or faster
Warning:	Information that is needed when there is a risk of losing data

# Organization of the guide

The Get-Answers Administration Guide contains the following chapters.

- Chapter 1, *Architecture Overview*, describes the structure of the Peregrine OAA Platform, which Get-Answers uses.
- Chapter 2, *Setting-up Get-Answers*, provides information about managing Get-Answers document collections and users.
- Chapter 3, *Using the Peregrine Portal*, describes the Peregrine Portal, the interface that users see when they log in to Get-Answers.
- Chapter 4, *Customizing the Peregrine Portal*, tells you how to customize the look of the Peregrine Portal.
- Chapter 5, *Personalization*, shows you how to set up Get-Answers so that users can change the information on the forms they see within the application.
- Chapter 6, *Schemas*, describes document schema definitions and explains how they map data between Get-Answers and the database.
- Chapter 7, *Get-Answers Administration*, provides an overview of the Get-Answers Admin module.
- Chapter 8, *Get-Answers Security*, provides information about granting and protecting access to Get-Answers.
- Chapter 9, *Customizing Get-Answers*, provides information about modifying the stop word list, creating custom dictionaries, and customizing the spelling checker used with the RTF editor.
- Chapter 10, *Get-Answers Workflows*, provides information about workflows in general, and the Triage and Editing workflows specifically.
- Chapter 11, *Importing Legacy Data*, tells you how to convert data from other applications such as Tivoli ServiceDesk or Knowlix to Get-Answers format.

• Chapter 12, *Document Types and Views*, tells you how to work with Document Types and Document Views.

# Contacting customer support

For help with this release, you can contact customer support, download documentation or schedule training.

## **Customer Support**

For further information and assistance with Product Name Short in general, contact Peregrine Systems' Customer Support at the Peregrine CenterPoint web site.

#### To contact customer support:

- 1 In a browser, navigate to http://support.peregrine.com
- **2** Log in with your user name and password.
- **3** Follow the directions on the site to find the information you need.

The KnowledgeBase contains informational articles about all categories of Peregrine products. If the KnowledgeBase does not contain an article that addresses your concerns, you can search for information by product; search discussion forums; and search for product downloads.

#### **Documentation** web site

For a complete listing of current Get-Answers documentation, see the Documentation pages of the Peregrine Customer Support web site.

#### To view the document listing:

- 1 In a browser, navigate to http://support.peregrine.com.
- **2** Log in with your login user name and password.
- 3 Click either Documentation or Release Notes at the top of the page.
- 4 Click the Get-Answers link.
- 5 Click a product version link to display a list of documents that are available for that version of Get-Answers.
- 6 Documents may be available in multiple languages. Click the Download button to download the PDF file in the language you prefer.

You can view PDF files using Acrobat Reader, which is available on the Customer Support Web site and through Adobe at http://www.adobe.com.

**Important:** Release Notes for this product are continually updated after each release of the product. Ensure that you have the most current version of the Release Notes.

#### **Education Services web site**

Peregrine Systems offers classroom training anywhere in the world, as well as "at your desk" training via the Internet. For a complete listing of Peregrine's training courses, refer to the following web site:

http://www.peregrine.com/education

You can also call Peregrine Education Services at +1 858.794.5009.

# 1 Architecture Overview

Peregrine Open Application Architecture (OAA) platform is a software platform that enables the hosting of a variety of Web applications over a corporate intranet. The platform is Java based, encompassing the latest in Java technology including Java servlets, JAAS login authentication, and JSP pages that enable Web pages to display data dynamically.

Peregrine OAA Platform is the underlying architecture for many Peregrine products, including the Get-It suite of Employee Self-Service products which offers:

<b>Get-It Product</b>	Description
BI Portal	Web-based reporting tool for creating and executing queries against ServiceCenter 5.1 data; and for generating reports and graphs based on that data.
Get-Answers	Web-based, knowledge management application that enables you to capture and store knowledge in a database, and to search for that knowledge when you need it. Using Get-Answers, you can improve the quality and accuracy of the knowledge that people in your company use to perform their jobs, and help them avoid calls to the service desk.

Get-It Product	Description
Get-Resources™	Web-based solution that integrates with AssetCenter Procurement, AssetCenter 4.x Portfolio, or ServiceCenter Request Management to enable employees to create requests for resources and to streamline the approval workflow of those requests throughout the organization.
Get-Services <sup>TM</sup>	Web-based extension of ServiceCenter that enables users to report problems in the work environment by opening problem tickets in Get-Services and then store them in the ServiceCenter back-end system. This allows users to view tickets from Get-Services and ServiceCenter. Modules include Administration, Service Desk, and Change Management (with ServiceCenter 5.0 and 5.1).

Peregrine OAA Platform provides a Web portal, Peregrine Portal, from which users can access their Web applications. The Peregrine Portal also provides access to the Admin module, from which all aspects of the Peregrine OAA Platform are monitored and maintained.

The base of Peregrine OAA Platform includes:

- Archway—a Java servlet that processes HTTP requests from a browser, sends the requests through an adapter to a back-end system, and returns XML data to be displayed in the browser.
- Core files—the Peregrine OAA Platform contains jsp and XML. The core consist mainly of low level Java utility classes used by the Portal Web applications built on the base OAA framework.
- Peregrine Portal—includes a login page and provides access to your Peregrine Web applications and to the Admin module for configuration of your application.
- Skins and style sheets—provide a choice for the appearance of the Web pages.

The Peregrine OAA Platform includes a number of optional components that are configured for use with Web applications as they are needed. These include:

- Adapters—enables connection to the back-end system database. The adapter required by your Web application is deployed during the installation.
- OAA Persistence (Get-Answers only)—provides a general purpose database that is used by certain Peregrine Web applications. OAA Persistence provides data persistence to a database.

- OAA Workflow (Get-Answers only)—enables workflow capabilities used by some Peregrine OAA Platform Web applications.
- Notification Services (Get-Answers only)—a centralized service for sending and receiving notifications through multiple communication devices and for tracking the status of these notifications.

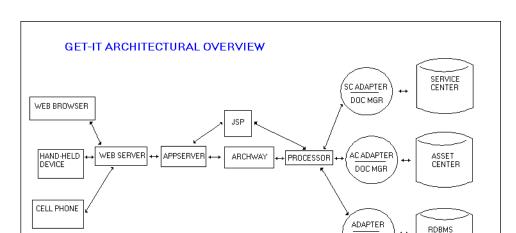
Separate documentation for Notification Services is provided with the Web applications that use this feature.

# **Peregrine OAA Platform architecture**

Peregrine OAA Platform applications and interfaces use Web-based building blocks that include:

НТТР	A simple and widely supported protocol for sending client requests to a server. Variations such as HTTPS provide security as well.
XML	Extensible Markup Language. A documentation meta-language that allows you to format data, which can then be displayed through a Web browser. Unlike HTML, you create your own XML tags and define them any way you want.
Commercial web servers	The services provided by the Archway architecture can be served from any commercial Web server, including IIS and Apache.
Application servers	Peregrine OAA Platform supplies Apache Tomcat for an application server with the installation. JRun, WebSphere, and WebLogic are also supported.
Common clients	Applications can be deployed via Web browsers (IE, Netscape), handheld devices (Palm Pilot), or mobile phones (through HDML).

The application server processes data (JSP pages, XML, and so forth) that it receives from the database or client that is specifically related to the Peregrine Systems Web applications. The Web server converts the data into a form (HTML) that can be displayed in a Web browser.



The following diagram illustrates the architecture:

The Archway component listens to HTTP requests from clients, routes the requests to an appropriate server, and returns data or documents. The requests supported by Archway can vary, but they fundamentally consist of queries, data updates, or system events.

DOC MGR

For example, a client can contact Archway and ask to query a database for a list of problem tickets. Another client could contact Archway and supply it with a new purchase request to be entered into the database.

All requests and responses are formatted using XML. For example, a problem ticket expressed in XML could appear as follows:

Clients that interact with Archway can do anything they need with the XML that is returned as a response. Very frequently, the client initiating the request is a user interface such as a Web browser. Such a client could easily display the XML documents returned by Archway. However, to be of better use, the XML documents are often displayed within a formatted HTML page. This is accomplished by using Java Server Pages (JSP).

JSP provides a syntax for creating HTML pages that is pre-processed by the Web server before being sent to the browser. During this processing, XML data obtained from Archway is merged into the HTML page.

Archway's architecture includes special support for automatically generating the HTML and JSP pages that make up a Web application.

# **OAA** scalability

You can ensure that OAA applications perform well as the number of users in your organizations grows. For complete information, see the Guide to OAA architecture and optimization, which is available for download in PDF format in the Product News section at

http://support.peregrine.com/support/Get-Answers.

# **Archway internal architecture**

Archway is implemented as a Java servlet. The Java servlet is an application executed by a Web server that processes HTTP requests from client Web browsers and sends the request, by way of an adapter, to a database. It then retrieves the requested information from the database and returns it to the client. Archway requires both a Java environment and a Web server.

Each request is interpreted to determine its destination. Archway is able to communicate with a variety of back-end systems, including the AssetCenter or ServiceCenter products from Peregrine.

Requests can be handled in one of three ways:

- A request can be sent directly to an adapter that talks to a back-end server.
   For instance, a query request for opened tickets could be forwarded to an adapter capable of communicating with ServiceCenter.
- A request can be sent to a script interpreter hosted by Archway. This enables you to define your own application-specific services. Within a script, calls can be made back to Archway to access the back-end system with database operations and events.
- Finally, a request can be sent to a component known as a Document Manager. This component provides automated services for combining logical documents.

Archway communicates with back-end systems with the help of specialized adapters that support a predefined set of interfaces for performing connections, database operations, events, and authentication. All adapters use DLLs to communicate with each application.

Messages can be routed to a script interpreter hosted by Archway. The interpreter supports ECMAScript, a European standard based on the Core JavaScript language used by Netscape (JavaScript) and Microsoft Internet Explorer (JScript).

Messages can be routed to the Document Manager component. This component reads special schema definitions that describe application documents for logical entities such as a purchase request, problem ticket, or product catalog. The script interpreter uses these schemas to automatically generate database operations that query, insert, or update such documents.

## **Archway requests**

Archway supports a variety of requests, all of which are based on two basic technologies: HTTP and XML. The HTTP protocol defines a simple way for clients to request data from a server. The requests are stateless and a client/server connection is maintained only during the duration of the request. All this brings several advantages to Archway, including the ability to support a large number of requests with the help of any of today's commercial Web servers.

Another important advantage is that any system capable of making HTTP requests can contact Archway. This includes Web browsers, of course. But in addition, all modern programming environments support HTTP. This makes it very simple to write new adapters that communicate with Peregrine servers without the need of specialized APIs.

You can test the output generated by your server-side onload scripts and schemas by using URL queries to the Archway servlet.

Archway will invoke the server script or schema as an administrative user and return the output as an XML document. Your browser will need an XML renderer to display the output of the XML message.

**Note:** Your browser may prompt you to save the XML output of the URL query to an external file.

#### **URL Script Oueries**

Archway URL script queries use the following format:

http://server name/oaa/servlet/archway?script name.function name

- For *server name*, enter the name of the Java-enabled Web server. If you are testing the script from the computer running the Web server, you can use the variable localhost as the server name.
  - The /oaa/servlet mapping assumes that you are using the default URL mapping that Get-Answersautomatically defines for the Archway servlet. If you have defined another URL mapping, replace the servlet mapping with the appropriate mapping name.
- For *script name*, enter the name of the script you want to run.
- For *function name*, enter the name of the function used by the script.

**Note:** URL queries functionality can be removed by configuring the WEB.xml file. This is a recommended security setting.

# URL Schema Oueries

Archway URL schema queries use the following format:

http://server name/oaa/servlet/archway?adapter name.Querydoc & document=schema name

- For *adapter name*, enter the name for the back-end database adapter the schema uses. The adapter listed here will use the ODBC connection that you have defined in the Admin module Settings page.
- For *schema name*, enter the name defined in the <document name="schema name"> element of the schema file.

The /oaa/servlet mapping assumes that you are using the default URL mapping that Get-Answers automatically defines for the Archway servlet. If you have defined another URL mapping, replace the servlet mapping with the appropriate mapping name.

#### URL SQL Oueries

Archway URL SQL queries use the following format:

http://server name/oaa/servlet/archway?adapter name.query&\_table=table name&field name=value&\_[optional]=value

- For *adapter name*, enter the name for the back-end database adapter the schema uses. The adapter listed here will use the ODBC connection that you have defined in the Admin module Settings page.
- For *table name*, enter the SQL name of the table you want to query from the back-end database.
- For *field name*, enter the SQL name of the field you want to query from the back-end database.
- For *value*, enter the value you want to the field or optional parameter to have.
- For \_[optional], enter any optional parameters to limit your query. Examples include:
  - \_return. Returns the values only of the fields you list.
  - \_count. Specifies how many records you want returned with the query.

The /oaa/servlet mapping assumes that you are using the default URL mapping that Get-Answers automatically defines for the Archway servlet. If you have defined another URL mapping, replace the servlet mapping with the appropriate mapping name.

The following are sample URL SQL queries:

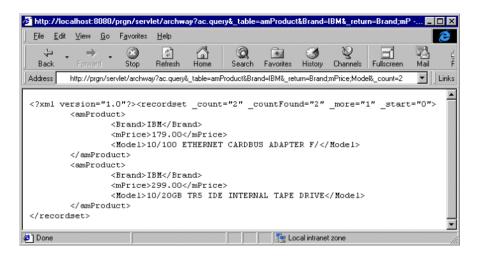
host name/oaa/servlet/archway?sc.query&\_table= probsummary&priority.code=1

This sends a query request to ServiceCenter for all records in the probsummary table with a priority code of 1.

host name/oaa/servlet/archway?ac.query& table=amAsset& return= Brand;mPrice;Model& count=2

This sends a query request to AssetCenter for the first two records in the amProduct table. Only the Brand, mPrice, and Model fields are returned for each record.

The screen below shows the XML results of a query for products from AssetCenter.



# The Document Manager

Archway uses XML to exchange data and documents between clients and the supported back-end systems. Fundamentally, the XML data returned by Archway is obtained by executing queries against one or more systems. The queries can be executed by a direct URL request or indirectly within an ECMAScript function.

Simple queries are only capable of returning record sets of data. However, clients are more often interested in exchanging documents. A Document is a logical entity built up of several pieces of data that can come from various physical database sources.

The Document Manager uses schemas to determine which XML elements to use and what data should be contained in the elements. The data used by the Document Manager depends on the back-end system being used.

# Setting-up Get-Answers

Using Get-Answers, your company can store and access documents on any topic. Get-Answers creates a structure in which you assign users roles and capabilities so they can access this information. Before using Get-Answers, you set up users and roles in the system. This chapter describes how to set up Get-Answers so that users can take advantage of its rich feature set.

#### Topics in this chapter include:

- *Users and roles* on page 28
- Categories and document ownership teams on page 44
- Managing categories and document ownership teams on page 46
- Configuring Spider (Web crawler) files on page 60
- Using Crystal Reports with Get-Answers on page 82

### Users and roles

Users, roles, and capabilities work together to help users get their work done. Users are the people who use Get-Answers. Roles are the duties that users perform when working in Get-Answers. Capabilities are the rights or permissions that users have as they work in Get-Answers. This section describes users, roles, and capabilities in detail. The section *Managing categories and document ownership teams* on page 46 describes how to set up and maintain users, roles, and capabilities.

#### **Users**

There are three types of users: the Administrator (Admin), the Anonymous user, and the standard users.

#### **Admin and Anonymous users**

This section explains the Admin and Anonymous users, and how to add a password for these users the first time you launch Get-Answers. The Admin user and the Anonymous user perform all of the administration functions for Get-Answers.

#### Admin users

There are two types of Admin users. One is the OAA Admin user named System. This Admin user has the rights to configure Get-Answers.

The other is the Administration user named Admin that the Get-Answers adapters require to verify users against the database. This user is not a person but a permission that is passed to the database each time a user logs in so that the system can authenticate the user with the database. The Administration user can make changes for users in the database. For example, most users do not have permissions to change anything in the database through Get-Answers. If a user wants to change their password, the system must pass this information to the database. The Administration user interacts with and changes information in the database on behalf of a user.

In the first procedure on page 29, you add a password for the OAA Administration user. In the second procedure beginning on page 30, you add a password for the Administration user that interacts with the database.

#### Anonymous users

The scriptpollers that Get-Answers Workflow uses require permissions. The Anonymous user provides those permissions.

**Important:** For security reasons, you must change the password for each Administration user when you first launch Get-Answers.

# **Setting System Maintenance passwords**

This section describes how to change the password for the System Maintenance administrator.

To change the System Maintenance user password:

1 Log in to Get-Answers using the admin.jsp page.

For example, go to http://<servername>/oaa/admin.jsp, where <servername> is your Get-Answers server name.

- Enter System in the User Name field.
- Leave the Password field blank.
- 2 Click System Maintenance.

The Control Panel page opens.

3 Click the **Settings** link on the left.

The Admin Settings page opens.

- 4 In System Maintenance password:, enter a password.
- **5** Scroll to the bottom of the page and click **Save**.

The Control Panel page opens.

**6** Click **Reset Server** at the bottom of the page.

A confirmation message appears at the top of the page.

**Note:** Your changes do take affect until the you click **Reset Server** to reset the application server.

# **Setting Administration passwords**

This section describes how to change the password for the Administration user and the administration user (anonymous users) that interacts with the database.

#### To add a password for the Admin and anonymous users:

- 1 Log in to Get-Answers using the login.jsp page. For example, go to http://<servername>/oaa/login.jsp, where <servername> is your Get-Answers server name.
  - In the Login Name field, enter Admin.
  - Leave the Login Password field blank.
- 2 Click Login.
- 3 Click the People tab.

The People Search page opens.

- 4 In the Login Name field of the People Search page, type Admin.
- 5 Click the Search button.

**Note:** If the People Search Results page opens first, find the Admin in the list. Go to step 6 without searching.

- **6** In the People Search Results page that opens, click the **Admin** link. The Person Details page opens.
- 7 In the Login Password field, type a password for the Admin.
- 8 Click the Submit Changes button.

The People Search Results page opens and a confirmation message appears at the top of the page.

- **9** Click the **Administration** tab.
- 10 Click the Settings link on the left side of the page.

The Admin Settings page opens.

- 11 Click the Get-Answers tab.
- 12 In the Administrator Password field, type the same password you used in step 7.
- 13 If the Anonymous Login name has the value "admin" or "Admin", then in the Anonymous Password field, type the same password as the one you used in step 7.
- 14 Scroll to the bottom of the page and click Save.

The Control Panel page opens.

- 15 Click the Settings link.
- **16** Click the **rome** tab.
- 17 In the Admin Password field, type the same password as the one you used in step 7.
- **18** If the Anonymous User field has the value "admin" or "Admin", then in the Anonymous Password field, type the same password as the one you used in step 7.
- 19 Scroll to the bottom of the page and click Save.
- 20 In the Control Panel page that opens, click Reset Server.

**Note:** Your changes do not take affect until you click **Reset Server** to reset the application server.

Important: When you change the Administrator user's password in the database via the People tab or when the Administrative user logs in, you must repeat step 9 through step 20. You should verify that the passwords on the Get-Answers tab for the user named "admin" or "Admin" and the passwords on the rome tab for the user name "admin" or "Admin" are in sync.

#### Standard users

A standard user is any user who does not have OAA Administrator rights. These users log in at http://<servername>/oaa/login.jsp page, where <servername> is your Get-Answers server.

Once you have created an Administrator account and used this account to set up roles, you can start adding standard users to the system.

#### **Roles**

Roles group users by capabilities, or rights. For example, the Editor role gives anyone assigned that role the permission to read, create, or update documents in a specified document ownership team. Every user in the system is a member of the Default role. In addition, the following roles are included with Get-Answers: Owner, Editor, Reviewer, and Reader. (See the sections, *Document ownership teams* on page 44, and *Managing categories and document ownership teams* on page 46 for more information.)

You can assign a user more than one role. Also, you can assign permissions to access the system to users, roles, or both.

## **Working with roles**

As an administrator, you can create, modify, and delete groups of users by assigning them roles.

You see menu options that are used by other Peregrine Web applications in the People module, which is where Get-Answers users are managed. Only the menu options used by the Get-Answers web application are documented here.

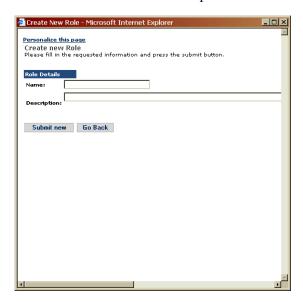
#### **Adding roles**

You add a role so that you can then associate users with the role and manage access to the documents in the system.

#### To add a role:

- 1 Click the People tab.
- 2 Click the Functional Roles link listed in Setup.
- 3 Click New to create a new role.

The Create New Role window opens.



- 4 Enter a name for the role.
- **5** Enter a description for the role.
- 6 Click Submit Changes when you finish.

#### Modifying roles

Once you have created a role, you can modify the name or description of the role.

#### To modify a role:

- 1 Click the People tab.
- **2** Click the Functional Roles link listed in Setup.
- **3** Enter the role name and the description. Then click **Search**.

**Note:** You can click **View All** without entering the name for a list of all roles.

The Role Search Results window opens.

**4** Select the role you want to modify.

The Role Details page opens.

5 In the Role Details page, make the desired modifications and click **Submit** Changes.

A confirmation message appears at the top of the Role Search Results page.

#### **Deleting roles**

You can delete roles from the system when they are no longer needed; however, when you delete a role you need to verify that any users accessing the documents in the system with the role you are deleting have other ways of accessing those documents or no longer need access to those documents.

#### To delete a role:

- 1 Click the **People** tab.
- **2** Click the **Functional Roles** link listed in Setup.
- **3** Enter the role name and the description. Then click **Search**.

**Note:** You can click View All without entering the name for a list of all roles.

The Role Search Results window opens.

4 Select the role you want to delete.

The Role Details page opens.

- 5 In the Role Details page, click **Delete** to remove the role.
- **6** Click **OK** in the delete verification message box. A confirmation message appears at the top of the Role Search Results page.

# Managing users and roles

An Administrator can add, modify, and delete users from Get-Answers. You can also assign users to roles, and you can assign as many users as you want to a role. You give the role and/or Document Ownership Team Permissions to a category.

**Note:** You may see menu options that are used by other Peregrine Web applications in the People module, which is where Get-Answers users are managed. Only the menu options used by the Get-Answers Web application are documented here.

#### Personalizing the Create New Person page

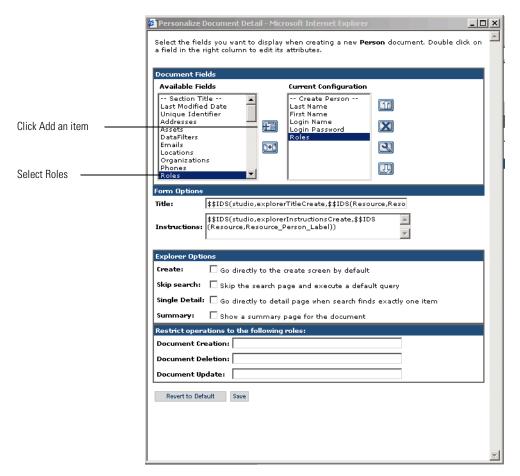
The default Create New Person page in the Peregrine Portal does not contain a hyperlink for adding roles for a user. Follow these instructions to set up the hyperlink now.

**Note:** For more information on using the Personalization interface, see Chapter 5, Personalization.

#### To add a hyperlink for adding roles to a user:

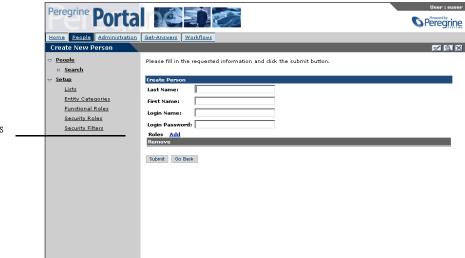
- 1 In the Peregrine Portal, click the **People** tab.
- 2 In the Person Search page, click New. The Create New Person page opens.
- 3 In the Create New Person page, click the Personalize this page icon (wrench). A Personalization window opens.

4 In the Personalize Document Detail window, select Roles from the Available Fields list.



- 5 Click the Add an item icon (plus sign). Roles appears in the Current Configuration list.
- 6 In current Configuration column, use the Move up or Move down icons (arrows) to select the position for Roles on the Create New Person page.
- 7 Click Save.

The Create New Person page now contains the Roles: (Add) hyperlink.



The Roles (Add) hyperlink appears on the page.

#### **Adding users**

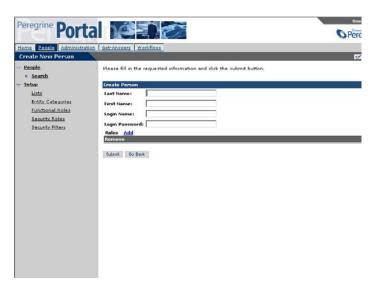
To add users to the system, you assign the user a login ID, password, and role in the system. A user's role determines the level of access the user has in the system.

#### To add a user:

- 1 In the Peregrine Portal, click the **People** tab.
- **2** In the Person Search form, click **New** to add a new user.

The Create New Person page opens.

**Note:** This illustration shows a Create New Person page with a personalized with a **Roles:** (<u>Add</u>) hyperlink as described in *Personalizing the Create New Person page* on page 34



- 3 Enter the Last Name and First Name for the user.
- 4 Enter the Login Name, and Login Password for the user.
- **5** To assign a user to a role, click **Add** next to Roles. The Add New Roles page opens.



**Note:** Before you can do this, you must add the **Roles:** (<u>Add</u>) hyperlink as described in *Personalizing the Create New Person page* on page 34.

- **6** In the Add New page, click the search icon.
- 7 In the Lookup Role page, enter search criteria or leave Name and Description blank, and then click **Search**.
- 8 In the Lookup Role result table, click the selected role.

**Note:** Do not select the Submitter, Member, Owner, Editor, or Reviewer role on this screen. These Get-Answers roles are assigned using the Manage Categories and Manage Document Ownership functions described in Managing categories and document ownership teams on page 46.



The role appears on the Add New Roles page.

- 9 Click OK.
- 10 Click Submit Changes to add the user.

The role(s) appears on the Create New Person page so you know the role (or group) that user belongs to.

**Important:** If you omit this step, the new user record is not saved.

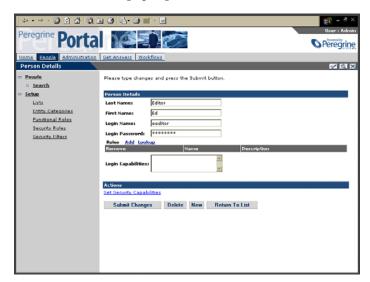
## Modifying users

Once a user has been added to the system, you can modify the user's profile by changing the roles assigned to the user.

## To modify a user:

- 1 In the Peregrine Portal, click the **People** tab.
- 2 In the Person Search page, do one of the following:
  - Enter the user's first name, last name, and login name. Then click Search.
  - Click View All for a for a list of all users.
- 3 In the Person Search Results page, click the name of the user you want to modify.

The Person Details page opens.



- 4 Make the desired modifications. See *Adding users* on page 36 for more details.
- 5 To add or change the security capabilities assigned to this user, click **Set** Security Capabilities link.

Please select from the list of available security elements. Select Capability Description Assets Management Assets Setup Manage Assets Setup Details People Manage People Organizations Manage Organizations Assign Role Assign Roles to people Manage People Setup Details People Setup Places Manage Places Manage Places Setup Details Places Setup Full access to system maintenance and administration activities. System Maintenance user ☐ Portal Allow access to the Peregrine Portal Personalization Sytem Maintenance Access to the system maintenance and administrative functions

The Set Security Capabilities page appears.

Personalization default Default capabilities for a Standard User

Workflow administrator access to admin interface
Workflow Template designer access to the designer interface
Workflow Process add rights to edit a running process

Workflow Standard User basic access to the task list

Get-Answers Administrator View all Get-Answers Document Ovnership Teams.
Get-Answers Reports View all Get-Answers Reports.
Notification Services Administrator Notification Services Administrator.
Notification Services GUI Allow a user to view the Notification Services GUI.

Send Notifications Allow a user to view the Send Notification activity in Notification Services.

access to the request module

Owners need this capability to create and edit forms.

**6** In the Set Security Capabilities page, click the check boxes next to a security capability to add or remove the capability, and then click **OK**.

Allow a user to view the Inbox and Outbox activities in Notification Services.

**Note:** You need administrative capability to grant security capabilities to other users.

7 Click Submit Changes when you finish.

**Important:** If you omit this step, the changes are not saved to the user record.

## **Deleting users**

View Notifications

☐ Workflow Request

To delete a user:

- 1 Click the People tab.
- 2 You can search on the user's first name, last name, and login name. Then click **Search** to find the user you want to delete.

**Note:** You can click **View All** without entering the user's name for a list of all users.

- 3 Select the user you want to delete.
- **4** In the Person Details page, click **Delete** to remove the user from Get-Answers.

## Capability keywords

This section describes how the capability words for menu items are used to control whether or not menu items display and examples of the roles capability keyword strings.

#### Menu item

For the menu item capability keyword for the Get-Answers tab, the out-of-the box are available as follows:

Get-Answers - ga.document.read; Admin, Owner, Editor, Reviewer, Reader, Submitter, Member

Search - ga.document.read; Admin, Owner, Editor, Reviewer, Reader, Submitter, Member

Browse Categories - ga.document.read; Admin, Owner, Editor, Reviewer, Reader, Submitter. Member

Contribute New Document - ga.document.new; Owner, Editor, Submitter

Manage Categories - ga.domain.manage; Owner (ga.domain.create to create New Categories; Owner)

Manage Document Ownership Teams - ga.docteam.manage; Admin, Owner (ga.docteam.create to create New Teams; Admin)

Manage Document Types - ga.document.edit; Owner, Editor

Import Documents - Roles.ga.\_admin; Admin user (Get-Answers Administrator check box on the Set Security Capabilities form)

Shared Content - ga.document.own; Owner, Editor

User Settings - ga.document.read; Admin, Owner, Editor, Reviewer, Reader, Submitter, Member

This screen image shows the menu items managed by the menu item capability keyword for the Get-Answers tab.



The following code is for the Reports menu items.

Reports - Roles.ga\_rptview; Admin user

Documents - Roles.ga\_rptview; Admin user

Document Feedback - Roles.ga\_rptview; Admin user

Usage History - Roles.ga\_rptview; Admin user

Search History - Roles.ga\_rptview; Admin user

Document Team Activity - Roles.ga\_rptview; Admin user

The following code is for the menu items on the Workflow tab:

Workflows - oaa.workflow.user; Admin, Owner, Editor, Reviewer, Reader My Messages - oaa.workflow.user; Admin, Owner, Editor, Reviewer, Reader My Requests - oaa.workflow.request; none Templates Design - oaa.workflow.designer; Admin Administration - oaa.workflow.admin; Admin

## User and role capability keyword strings

Admin user capability keyword strings appended by Get-Answers to the *out-of-the-box* capability keyword strings:

Roles.ga\_rptview;Roles.ga\_admin;oaa.ns.admin;oaa.ns.gui;oaa.ns.preferences; oaa.ns.send;oaa.ns.view;oaa.workflow.user; oaa.workflow.designer;oaa.workflow.admin;oaa.workflow.processeditor

Owner role capability keyword strings:

ga.user.process;ga.document.read;ga.document.new; ga.document.edit;ga.document.own;ga.docteam.manage;ga.domain.manage; ga.domain.create;ga.domain.delete;oaa.workflow.user

Editor role capability keyword strings:

ga.user.process;ga.document.read;ga.document.new;ga.document.edit; oaa.workflow.user

Reviewer role capability keyword strings:

ga.user.process;ga.document.read;oaa.workflow.user

Reader role capability keyword strings:

ga.user.process;ga.document.read;oaa.workflow.user

Submitter role capability keyword strings:

ga.document.read;ga.document.new

Member role capability keyword strings:

ga.document.read

In the Person details form under the People tab, the Set Security Capabilities shows these two Get-Answers check boxes, which correspond to these capability keywords:

Get-Answers Administrator:

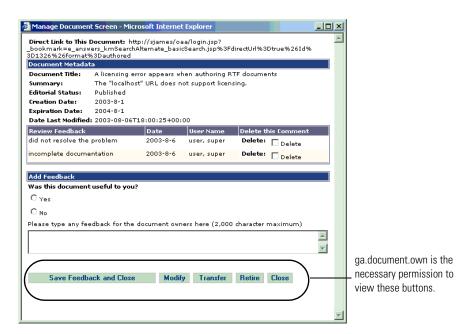
ga.docteam.admin;ga.docteam.create;ga.docteam.manage;ga.docteam.own; ga.docteam.delete;ga.document.read;ga.documents.submit batch

Get-Answers Reports:

Roles.ga\_rptview

#### **Buttons**

Capability keywords also determine what buttons appear on a page. For example, ga.document.own is the permission necessary to see the Modify, Transfer, and Retire buttons in the Manage Document Screen window.



# Categories and document ownership teams

Document ownership teams, which are groups of individuals in Get-Answers, manage categories. This section provides the concepts behind these key functions in Get-Answers.

## **Document ownership teams**

Document ownership teams manage documents. Only one document ownership team owns a given document. You can transfer ownership of a document from one ownership team to another, but a document can never belong to more than one document ownership team at a time.

You can associate document ownership teams with any number of categories, but there is a single document ownership team for each category. This document ownership team becomes the owner of any new documents submitted to the team.

When a new document is submitted to a team, that team owns the document. Users with the permission owner within the document ownership team can transfer ownership of the document to another document ownership team, if appropriate.

Seven capabilities are defined within document ownership teams. These capabilities are used to define four permissions for document ownership teams. You can associate users or roles with one or more of the four permissions in a document ownership team.

The capabilities for document ownership teams include:

- Read Can read working copies of documents.
- Create Can create new documents.
- Update Can check documents out, edit them, and check them back in.
- Revert Can revert a document back to its published version and delete the working copy.
- Retire Can retire documents.
- Publish Can publish documents into any of the categories associated with the document ownership team.
- Transfer Can transfer ownership of a document to another owner.

The roles and their capabilities within a document ownership team include:

- Owner Read, Create, Update, Revert, Retire, Publish, and Transfer capabilities
- Editor Read, Create, and Update capabilities
- Reviewer Read and Review capabilities
- Member Read published documents
- Submitter Create new documents
- Reader Read unpublished documents and create new documents.

In addition, owners, editors, and reviewers have particular responsibilities in the Editorial and /or Triage workflows. Readers play no part in the workflows. For information on workflows, see the *Chapter 10*, *Get-Answers Workflows* on page page 243.

## **Categories**

A category is a grouping of published documents in Get-Answers. You can create categories by company department or another grouping method. For example, you can create a category in Get-Answers that contains all documents related to Human Resources.

Documents are published into categories. Categories can contain any number of documents. A document can belong to any number of categories. However, a new document can only be submitted to one team that manages it. A category is owned by one ownership team. Within categories, you can control the document hierarchy by creating categories for your documents.

An unpublished document has no category. A published document is assigned to a category.

Within categories, there are two permissions. A category Member has read access to any document published to the categories. A category Submitter has read access to any document published into the category and can submit new documents to the category for review and possible publication by the categories document ownership team.

# Managing categories and document ownership teams

Using the Manage categories menu option, a document team owner can add, modify, and delete categories from Get-Answers. Documents are published by categories, so by managing document categories you are actually managing how documents are grouped when they are published.

## Working with categories

Categories group published documents by subject, department, or any other parameter you choose. Once you set up a category, you can divide it into subcategories. The following procedures describe how to add, change and delete categories and how to do the same for subcategories.

## Adding, changing, or deleting categories

Use the following procedures to work with categories in Get-Answers.

**Important:** When you name categories, remember that category names cannot contain forward or backward slashes.

#### To add a category:

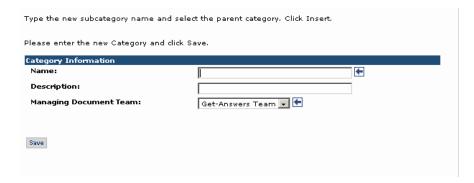
1 Click the Get-Answers tab and then click Manage Categories in the menu options.

The Search for Categories page opens.



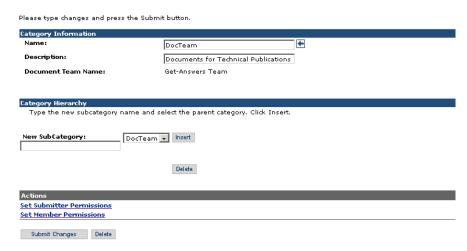
2 Click New.

The Category Detail page opens.



- **3** Enter a **Name** for the category.
- **4** Enter a description of the category in the **Description** field.
- **5** Select the managing document team for the category.
- 6 Click Save.

The Category Detail page re-opens with additional detail. The Name, Description, and Document Team fields are filled in.



- 7 In the Category Hierarchy section, type a New Subcategory.
- 8 In the Actions section, update the category permissions for the category by clicking the hyperlinks for submitter and member permissions (Set Submitter Permissions, Set Member Permissions).

In the Permission Detail page for submitter and member you can assign roles (group of users) or individual users to that particular permission for either a Submitter or a Member.

### To add submitter permissions:

- 1 Click
- 2 For Submitter Permissions, click Add Role to assign a role (group of users) to this permission.
- 3 In the Search for Roles page, enter the role name you want to add and click Search.
- 4 Click the role and it appears on the Permission Detail page. Do this for as many roles as you want to add.
- 5 Click Add User to assign an individual user to this permission.
- 6 In the Search for Users page, enter the name of the user you want to add and click Search.

- 7 Click the user name and it appears on the Permission Detail page. Do this for as many users as you want to add.
- 8 Return to the category Detail page.
- **9** To control document hierarchy, you can add categories to the category. To add a new category, enter a name in the Category field and click Add Category.

**Result:** The new category appears in the list of category Categories.

- 10 To delete a category, select the desired category from the list and click **Delete** Category.
- 11 Click Save Changes when you finish.

#### Modifying categories

To modify a category:

- 1 Click the Get-Answers tab. Then click Manage Categories in the menu options.
- **2** Enter the category name. Then click **Search** to find the category you want to modify.

**Note:** You can click **Search** without entering the category name for a list of all categories.

**3** Select the category. In the Category Detail page, make the modifications and click Save Changes.

**Note:** For details on the category options, see Adding, changing, or deleting categories on page 47.

#### Deleting categories

You can only delete a category or a subcategory that has not published documents in it and no subcategories.

## To delete a category:

- 1 Click the Get-Answers tab. Then click Manage Categories in the menu options.
- **2** Enter the category name. Then click **Search** to find the category you want to delete.

**Note:** You can click **Search** without entering the category name for a list of all categories.

**3** Select the category to delete.

4 In the Category Detail page that opens, click Delete category to remove the category.

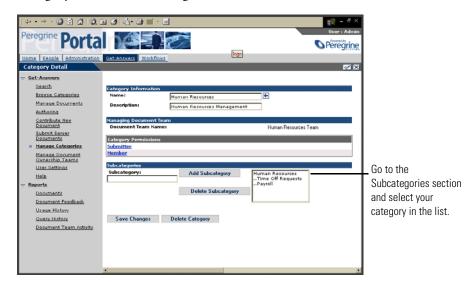
### Adding, changing, or deleting subcategories

Subcategories group documents in a category by subtype. For example, the category Human Resources could have subcategories of Payroll, Performance Reviews, and Time-Off Requests. This section explains how to work with subcategories.

In the following procedure, work with an existing category. (See Working with categories on page 46 to add categories.)

#### To add, change, or delete a subcategory:

- 1 From the Get-Answers Home page, click Get-Answers, and then click the Manage Categories link in the Get-Answers activity menu.
  - The Search for Categories page opens.
- 2 Enter a category, and click Search, or leave the field blank and click Search to see all categories.
- 3 Click the category you want in the list that opens. The Category Detail page opens.
- 4 In the Category Detail page, find the Subcategory section, and click the category in the list on the right.



**Important:** You must select the category in the list on the right before you can add a subcategory.

- **5** Do one of the following:
  - To add a subcategory, type the new name in the Subcategory field and click Add Subcategory.
  - To delete a subcategory, click the subcategory in the list on the right and click Delete Subcategory.
- 6 Click Save Changes.

The message "Changes have been successfully saved" appears at the top of the page.

## Adding submitter permissions for a category

Once you create a category or subcategory, you need to set submitter permissions for the category so users can use the category to manage documents. You can add submitter permissions by adding roles and adding users. A role gives a groups of users submitter permissions to the new category, or you can add a user to give an individual user submitter permissions.

**Important:** Users who have access to a category have access to all of its subcategories. You cannot assign users to specific subcategories.

## To add submitter permissions to a category:

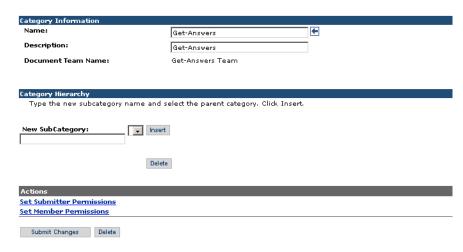
1 From the Get-Answers Home page, click Get-Answers, and then click the Manage Categories link on the left side of the page.

The Search for Categories page opens.

Please enter the	search criteria and click Search.
Names	
Search New	

- 2 Enter a category, and click Search, or leave the field blank and click Search to see all categories.
- 3 Click the category you want in the list that opens.

The Category Detail page opens.



**4** For the category information you select, click **Set Submitter Permissions**. The Permission Detail page opens.



5 To give submitter permissions to a role, click **Add Role**. The Search for Roles page opens.

- 6 Enter the name of the role you are searching for and click Search, or click Search to list all the roles defined in the system.
  - The Role List page opens.
- 7 In the list, click the role you are adding to submitter permissions. The Permission Detail page opens with the role you selected added.
- 8 Click Save.
  - You can continue to add roles for submitter permissions or individual users (next step) or
- 9 Click Add User.
- 10 In the Search for users page that opens, enter the user's first name, last name, or user login, and click Search.
- 11 In the List of Users page that opens, click the user's name in the list. The Permission Detail page that opens, the user you've added appears on the list, and the message, "A user has been added to this permission" appears at the bottom of the page.
- 12 Click Save to return to the Category Detail page.
- 13 Click Submit Changes.

### Adding member permissions for a category

Once you create a category or subcategory, you need to set member permissions for the category. When you set member permissions for a category you are giving read access to users or groups of users (roles) for all the documents in that category. You can add member permissions by adding roles and adding users. A role gives a groups of users member permissions to the new category, or you can add a user to give an individual user member permissions.

**Important:** Users who have access to a category have access to all of its subcategories. You cannot assign users to specific subcategories.

## To add member permissions to a category:

- 1 From the Get-Answers Home page, click Get-Answers, and then click the Manage Categories link on the left side of the page.
  - The Search for Categories page opens.
- 2 Enter a category, and click Search, or leave the field blank and click Search to see all categories.

- 3 Click the category you want in the list that opens. The Category Detail page opens.
- 4 For the category information you select, click Set Member Permissions. The Member Detail page opens.
- **5** To give member permissions to a role, click **Add Role**. The Search for Roles page opens.
- **6** Enter the name of the role you are searching for and click Search, or click Search to list all the roles defined in the system.
  - The Role List page opens.
- 7 In the list, click the role you are adding to member permissions. The Member Detail page opens with the role you selected added.
- 8 Click Save.
  - You can continue to add roles for member permissions or individual users (next step) or click Save to return to the Category Detail page and click Submit Changes.
- 9 Click Add User.
- 10 In the Search for users page that opens, enter the user's first name, last name, or user login, and click **Search**.
- 11 In the List of Users page that opens, click the user's name in the list. The Permission Detail page that opens, the user you've added appears on the list, and the message, "A user has been added to this permission" appears at the bottom of the page.
- 12 Click Save to return to the Category Detail page.
- 13 Click Submit Changes.

## Working with document ownership teams

You can use the Manage Document Ownership Team link add, modify, and delete ownership teams from Get-Answers.

**Note:** You must have rights to create a new document ownership team. These rights should be part of the Admin role or in some cases you may need to make them part of the role that is responsible for managing the document ownership teams.

Use the following procedure to assign the rights to create or modify a document ownership team.

#### To grant get-answers capabilities to a user:

- 1 In Get-Answers, click the **People** tab.
- 2 Use the Search page that opens to find the person you want to give capabilities.
- 3 In the Person Details page that opens, click Set Security Capabilities.
- 4 Click the check box next to Get-Answers Administrator to place a check mark there.
- 5 Click OK.
- 6 In the Person Details page that reopens, click Submit Changes.

## Adding document ownership teams

Each new document ownership team must have an owner. You create this owner by giving one of the users the *owner* permission for the team. The selected owner can then manage all other aspects of the team (give other users permissions, manage documents, etc.).

**Note:** After you create the new document ownership team, log off as Administrator and log in as the team owner and go to 'Manage categories" to create one or more categories and, if desired, categories of documents under the category.

## To add a document ownership team:

- 1 From the Get-Answers tab, click Manage Document Ownership Teams link. The Search for Document Teams window opens.
- 2 Click New
  - The Document Team Detail page opens.
- 3 In Name, type the name of the new document ownership team.
- 4 Click Save.

### The Permission Detail page opens.



- 5 Click Add Role to assign a role (group of users) to this permission.
- **6** In the Search for Roles page, enter the role name you want to add and click Search.
- 7 Click the role.

The role you select is listed on the Permission Detail page. Do this for as many roles as you want to add.

- 8 Click Add User to assign an individual user to this team.
  - The Search for Users window opens.
- **9** In the Search for Users window, enter the name of the user you want to add and click **Search**.
- 10 Click the user name.

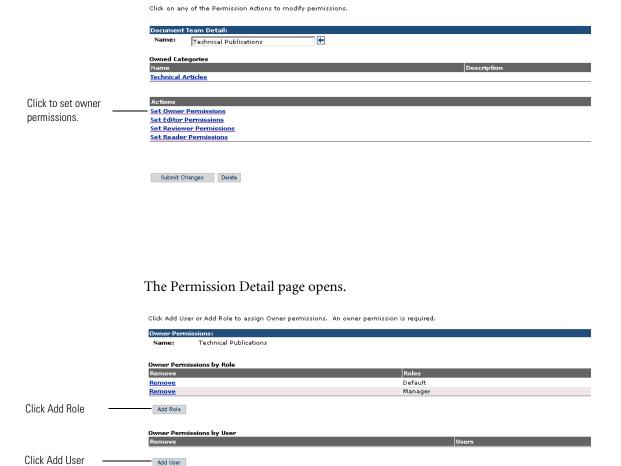
The user name you selected appears on the Permission Detail page. Do this for as many users as you want to add.

- 11 In the Permission Detail page, click Save.
  - The Document Team Detail page opens.
- **12** Click Submit Changes
- 13 Click Save Changes when you finish.

**Important:** Whenever you create a new document ownership team, you must set owner permissions for the new document team.

## To set permissions for a document ownership team:

1 In the Actions section of the Document Team Detail page, click Set Owner Permissions.



2 Click Add Role.

Save

The Search for Roles page opens.

A role has been added to this permission.

3 Click Search or type the name of the role.

The Roles List page opens.

4 Click the role from the list.

The Permission Detail page opens with the role you selected listed in the Owner Permissions by Role section.

5 Click Save.

The Document Team Detail page opens.

- **6** In the Actions section, click one of the following:
  - Set Editor Permissions
  - Set Review Permissions
  - Set Reader Permissions

and repeat steps 2 to 6 until all permissions are set.

**Note:** You can use both add users and add roles to set up the permissions for the new document ownership team.

### Modifying document ownership teams

To modify a document ownership team:

- 1 Click the Get-Answers tab. Then click Manage Document Ownership Teams in the menu options.
- 2 Enter the document team name. Then click Search to find the document team you want to modify.

**Note:** You can click **Search** without entering the document team name for a list of all ownership teams.

3 Select the desired document team. In the Document Team Detail page, make the desired modifications and click Save Changes.

**Note:** For details on document team options, see *Adding document* ownership teams on page 55.

## Deleting document ownership teams

To delete a document ownership team:

- 1 Click the Get-Answers tab. Then click Manage Document Ownership Teams in the menu options.
- 2 Enter the document team name. Then click Search to find the document team you want to delete.

Note: You can click Search without entering the document team name for a list of all document teams.

3 Select the desired document team. In the Document Team Detail page, click Delete Document Team to remove the document team.

**Note:** If any documents or child categories exist for the document team you are deleting, the system does not allow you to delete the document team.

# **Configuring Spider (Web crawler) files**

The following sections describe how to start and stop the Web crawler and automate and configure the Spider files. It also explains how to set up a firewall so that the Spider Web crawler is able to search the Web within the range of specified URLs and create an index, which then becomes available to users as part of the Get-Answers knowledge base and how to clear the KMspider indexes.

**Note:** Before you begin configuring the Spider files, you should first setup the Spider database. See *Setting Up the Web crawler*, in the *Get-Answers Installation Guide*.

## Starting and stopping the Web crawler

You can start the Web crawler manually using the Get-Answers Search Engine System utilities.

#### To start or stop the Web crawler:

- 1 Manually start the spider processes.
  - a Unless the search engine server is already started as a service or running in a DOS window, start it by choosing **Start** >**Programs** >**Get-Answers Search Engine** >**Start Search Engine** Search Server and press Enter to exit the command prompt window.
  - **b** Choose Start > Programs > Get-Answers Search Engine > System Utilities.
  - c From the system utilities menu, select option 14, GetAnswers Search Engine Internet Spider Utilities.
  - **d** In the order listed on the menu, start the O2 server, then the URL server.

**Note:** Verify the O2 server is up and running in a separate DOS window before starting the other servers.

**e** Start the Internet Spider support and processes (4 and 5), specifying the spider library, KMSpider when prompted.

The search engine server dialog will display the URLs being crawled. Then the search engine will index these documents.

You can check the indexlog.dat file for an INDEX COMPLETE message.

2 Stop the spider processes.

- a From the system utilities menu (step 4b), select option 14, GetAnswers Search Engine Internet Spider Utilities.
- **b** Do the following:
  - Shutdown the Internet Spider and support processes < spider, tagent,</li> tproc>.
  - Stop the url server.
  - Stop the O2 server.
- **c** Exit from System Utilities by entering a series of 1s.

## **Automating the Spider processes**

The following section describes how to edit configuration files to set up the Spider to crawl and index automatically instead of running it manually through the system utilities menu.

To edit the exec.cfg file found in c:\<\$USER\_INSTALL\_DIR\$\peregrine\config:

- 1 Before editing, make a backup copy of the exec.cfg file.
- **2** Using a text editor, open the exec.cfg file.
- **3** When setting up the processes:
  - Run the KMSpider processes in the following order at least one minute apart from each other: urlserv, tagent KMSpider, tproc KMSpider, and then spider\_KMSpider.

**Note:** Starting on the left, the asterisks define the minute, hour, day of the month, month of the year, and day of the week.

In the following example, the urlserv is set to index every midnight and the subsequent processes are started one minute after each other

```
CRONTAB {
  EXECUTE "spider_KMSpider" "3 0 * * *";
  EXECUTE "tagent_KMSpider" "1 0 * * * ";
  EXECUTE "tproc_KMSpider" "2 0 * * *";
  EXECUTE "urlserv" "0 0 * * *";
```

4 In the CRON\_PROG statements for spider\_KMSpider, tagent\_KMSpider, and tproc\_KMSpider, remove the FLAGS INITIALLY\_DEACTIVATED; line.

```
CRON_PROG "spider_KMSpider" {
  COMMAND "${SPIDER DIR}\bin\spider"
         "${SPIDER_DIR}\KMSpider/config/spider.cfg"
  FLAGS INITIALLY DEACTIVATED;
CRON_PROG "tagent_KMSpider" {
  COMMAND "${SPIDER_DIR}\bin\tagent"
        "${SPIDER_DIR}\KMSpider/config/spider.cfg"
 FLAGS INITIALLY_DEACTIVATED;
CRON PROG "tproc KMSpider" {
  COMMAND "${SPIDER_DIR}\bin\tproc"
         "${SPIDER_DIR}\KMSpider/config/spider.cfg"
  FLAGS INITIALLY_DEACTIVATED;
}
CRON_PROG "urlserv" {
  COMMAND "${SPIDER_DIR}\bin\urlserv"
        "-p 3127" ;
```

- 5 Start the search engine and the O2 server of the Spider utilities. The Spider processes automatically run/index in the background at the times you specified.
  - a Unless the search engine server is already started as a service or running in a DOS window, start it by choosing Start >Programs >Get-Answers Search Engine >Start Search Engine Search Server and press Enter to exit the command prompt window.
  - **b** Choose Start > Programs > Get-Answers Search Engine > System Utilities.
  - c Select option 14, GetAnswers Search Engine Internet Spider Utilities.
  - d Select option 2, Start O2 server.
  - e Exit from System Utilities by entering a series of 1s.

## **Spider configuration files**

A Spider library has several configuration files.

• spider.cfg is the main Spider configuration file. All configuration for the Spider library is done in or linked through this file.

- start.lst is an optional file with a list of URLs to use as the starting points of the crawl.
- permission.lst specifies domains, hosts, directories, and extensions that Spider is allowed to process.
- proxy.cfg is only used if you have an HTTP proxy firewall. It contains proxy configuration options for crawling with an HTTP proxy. It specifies when to use direct connections (inside the firewall) and when to use the proxy (outside the firewall).
- revisit.cfg is an optional file that specifies how often previously visited URLs should be revisited.
- forms.lst is an optional file used to process forms and HTTP or FTP user authorizations.
- cookies is an optional file used to store state information between Spider and a host server.

### spider.cfg

Note the following rules for the spider.cfg file:

- Any line beginning with a pound sign ( # ) is considered a comment line.
- Each command line lists the parameter name followed by a colon (:) and the value.
- If two values are given for the same parameter, the last value is used. No error is reported.
- Using unknown parameters produces no effect. If parameter names are misspelled or undefined, no error is reported.
- Parameter names listed with no parameter value (just white space) are considered empty and the default value is used, if one exists.

The parameters in the following chart must be set in spider.cfg directly. Edit the spider.cfg, in a text editor. Some of these parameters are already in spider.cfg, but they are deactivated by a pound sign (#) at the beginning of the line—which causes the default values to be used. To set a different value for one of these parameters, remove the pound sign from the line, and enter an appropriate value.

Parameter	Description
afm_libpath	Specifies the path to the AFM library files being used by Spider. The default is SPIDERHOME/bin.
afm_loglevel	Specifies the level of AFM processing detail you wish to store in the log file. Valid values are 0-4, where 4 is the highest level of information. The default is 0 (no logging).
afm_lst	Specifies the path to the afm.lst file being used by Spider. The default is SPIDERHOME/spider-lib/config/afm.lst.
afm_rul	Specifies the path to the afm.rul file being used by Spider. The default is SPIDERHOME/afm.rul.
conn_timeout	Specifies the number of idle seconds before Spider disconnects the socket connection to the HTTP/FTP server. The default is 20 seconds.
follow_redirect	Enables or disables URL redirect control: 1=automatically follow redirects encountered; 0=do not follow redirects. If you choose 1, the HTTP/HTTPS AFM automatically follows moved links until it encounters a URL that is not moved, or the maximum number of redirects (16) is reached. If you choose 0, the AFM marks the URL as "moved" and generates an HTML file with the redirected link as the output file. The default is 0.

Parameter	Description
index_waiting_time	When the storage_path parameter is not specified, this parameter determines how long tproc should wait for the document handler to finish indexing the document when it is not stored locally. If the length of the document is larger than 1 MB, tproc will wait for the number of seconds calculated by the following formula (where doc_length is in KB):
	index_waiting_time*floor(doc_length (KB)/256) For example, if the index_waiting_time is 2 and the size of the document is 2 MB, then the waiting time is 2 * floor $(2*1024/256) = 16$ seconds. The default is 2.
local_cookies	Specifies how to manage cookies: 1=manage cookies locally (per module basis); 0=use cookies passed in as parameters. The default is 0.
min_cache	Specifies the minimum database cache size in megabytes. The default is 64.
nfile_hashdbm	Specifies the number of underlying database files for the VISDIS filter database. The default is 5.
nsync_read_initurls	Spider parses this number of starting URLs in the main thread and then starts the tfetcher (starts crawling). Spider then launches the thread to parse the rest of the URLS in the initial URL file. This thread will sleep for waittime_nonsync_read seconds after it's done processing every nsync_read_initurls URLS. The default is 100.
process_ftp_dirlist	Enables or disables the FTP AFM: 1=convert the directory list transferred from the FTP site into an HTML file with the subdirectories as HTML links, which Spider can crawl; 0=disable FTP crawling. The default is 1.
rware_name_server	Specifies the host name and port number of a remote RetrievalWare (search engine) name server for Spider to connect to. (Example: rware_name_server: rwhost:6000)
use_host_distance	Enables or disables the host distance filter (host_distance). Use 1 or on, 0 for off. The default is 1.
use_url_distance	Enables or disables the distance filter (url_distance). Use 1 or on, 0 for off. The default is 1.

Parameter	Description
verbose	Specifies a level for the types of messages that appear in the log files for tagent and tproc. A message appears in the log file only if its assigned verbose level is less than or equal to this verbose level setting. The default is 0.
waittime_nonsync_read	See nsync_read_initurls above. The default is 20 seconds.

#### start.lst

You can edit this file in a text editor.

If the crawl should begin at several URLs, parameter initial url in the spider.cfq is set to the start.lst file. An example start.lst file follows:

```
#list of urls for initial_url:
http://www.convera.com/
ftp://ftp.example.com/
https://https.example.com/
```

#### url distance

The url\_distance parameter in the spider.cfg is the default maximum distance of all of the listed URLs. However, if a different maximum distance needs to be set for one or more of the URLs listed in the start.lst file, the url\_distance parameter is listed immediately below the URL to which it applies. For example, if the url\_distance parameter is set to 3 in the spider.cfg, but you want to restrict the crawl on

http://www.example.com/headlines/sports to 2, the start.lst file would look like this:

```
#list of urls; all will use the default url_distance in the
spider.cfq
# except those URLs with a url_distance parameter below them.
http://www.convera.com
http://www.example.com/headlines/sports
url distance: 2
http://example.com/recreation/
```

## host distance

You can also use the **host\_distance** parameter along with the **url\_distance** parameter in this file.

Host distance is very similar to URL distance. The only difference is that while URL distance starts counting down right from the starting URLs, host distance starts counting when Spider goes off of the starting host (the host where the starting URL resides). Spider will not crawl any further along the current sequence of URLs whenever either the host\_distance or url\_distance runs out.

For example, consider the following starting URL:

```
http://www.convera.com/
url_distance: 50000
host_distance: 0
```

In this case, the starting host is www.convera.com. With host\_distance set to 0, Spider will not visit (nor will it follow any forward links of) any URL that does not start with http://www.convera.com/. If the host\_distance is set to 1, Spider will crawl practically everything on www.convera.com and then all documents 1 link away from any pages on www.convera.com.

If the host\_distance is set to 2, Spider will crawl practically everything on www.convera.com and then all documents 2 links away from any page on www.convera.com, and so on.

If, however, we had the following setting:

```
http://www.convera.com/
url_distance: 2
host_distance: 5
```

it is most likely that the url\_distance will run out before Spider even gets to a document one link away from pages on www.convera.com. The url\_distance is the limiting factor in this crawl.

## permission.lst

You can edit this file using a text editor.

The purpose of the permission.lst file is to list the URLs that are allowed or disallowed on the crawl.

It is named in the parameter permission\_list\_file in the spider.cfg file.

Regular expressions are used to specify the URLs to crawl and index.

The following rules control which files Spider crawls:

```
allow
disallow
strong_allow
```

To allow URLs that match a regular expression, precede the regular expression with allow:. To disallow URLs that match a regular expression, precede the regular expression with disallow:. If no lines begin with allow:, all URLs are allowed. If a URL is matched by both an allow and a disallow, the disallow takes precedence. In other words, you can allow everything and override the exceptions with disallow. strong allow works in reverse (it overrides disallow). In this case, you can disallow everything and override the exceptions with strong\_allow statements.

You can also specify whether or not certain files are indexed using these indexing rules:

```
index_allow
index_disallow
index strong allow
```

These rules work exactly like the crawl rules, except they are applied after a file is fetched. For example:

```
allow: http://www.convera.com
disallow: /partners/
strong allow: /solutions\.html$
index_allow: \.html$
index disallow: /company/
index_strong_allow: /management\.html$
```

This example specifies that Spider should crawl the www.convera.com site, except for the partners directory, and crawl any URL ending with solutions.html, even if it is in the partners directory. (Note that a URL ending with solutions.html will not be crawled if it is not referenced by an allowed URL outside the partners directory.) The parameters then specify to index (amongst the files crawled) all HTML documents unless they are from the company directory. It further specifies to index any URL ending with management.html, even if it is found in the company directory.

Each rule in the permission list file is a set of regular expressions. A URL u matches a regular expression r if r matches any substring of u. The set of URLs M(R) that matches a rule R is the set of URLs that match any regular expression r in R.

The set A(S) of URLs allowed in any set of URLs S is

```
A(S) = S intersection ( M(strong\_allow) union ( M(allow) minus M(disallow) ) )
```

where strong\_allow is the strong allow rule, allow is the allow rule and disallow is the disallow rule.

Suppose there is no URL and host distance limitation. Let S be the set of URLs in the start.lst. The set A of URLs that Spider crawls is determined by the following recursive rule:

- 1 A(S) belongs to A
- **2** If u belongs to A and links(u) is all the URLs referenced by u, then all URLs in A(links(u)) belong to A
- 3 No other URLs belong to A.

Following is an example of a permission. Ist file.

```
# Copyright 1999-2002 Convera Technologies, Inc.
#-----
# * All comments start with #
# * All blank lines are not processed
# SYNTAX: strong-allow: <URL extended regex pattern>
# allow: <URL extended regex pattern>
# disallow: <URL extended regex pattern>
# (1) If no allow field is given, it is assumed that all URLs are
allowed.
# (2) If no disallow field is given, no URLs are disallowed.
# (3) Disallows take precedence over allows but not over
strong-allows.
# (4) Strong-allows will override disallows and guarantee the URL
matching
# the regex will be crawled.
# Commonly used regular expression patterns:
# ^ beginning of line
# $ end of line
# \ escape -- make following character literal, no special meaning
# . any single character
# * zero or more of the PRECEDING character (or class)
# + one or more of the PRECEDING character (or class)
# ? zero or one of the PRECEDING character (or class)
# [] character class -- any one of the contained characters or range
# [^] character class -- any one character NOT in the class or range
# This example file allows the following URLs to be crawled:
# (1) http://www.yahoo.com/Entertainment/*
# (2) *.html, *.htm (case insensitive)
# (3) *.text, *.txt (case insensitive)
# (4) */ (URLs ending with a slash; i.e. directories)
# (5) */ (a sequence of characters without a '.'; i.e. files without
extensions)
```

```
# Except (2) - (5) have the following restrictions:
# (1) */bin/*
# (2) */cgi-bin/*
# (3) *?* (decorated URLs that pass variables to forms)
# (4) *netscape.com*
# (5) *www.yahoo.com*
strong_allow: www\.yahoo\.com/Entertainment/
allow: \.[Hh][Tt][Mm][L1]?$
allow: \.[Tt][Ee]?[Xx][Tt]$
allow: \.[Dd][Oo][Cc]$
allow: \.[Pp][Dd][Ff]$
allow: /$
allow: /[^.]+$
disallow: /bin/
disallow: /cgi-bin/
disallow: [?]
disallow: netscape.com
disallow: www\.yahoo\.com # The strong-allow above still
# allows Entertainment/ to be crawled.
# Technically, the above example only crawls the specified URLs.
# Indexing the pages is controlled by another set of keywords:
# index_allow, index_disallow, index_strong_allow
# These keywords follow the same syntax and rules as the basic
keywords,
# so leaving them out of the file would result in all crawled pages
# indexed (by Rule 1). Note that pages must be crawled before they
can be
# indexed.
# Often the indexing keywords are used to prevent indexing of pages
# are uninteresting for their content, but are important to the
continuation
# of the crawl.
index_disallow: /links\.html?$
```

### Crawling SHTML files

Spider can retrieve and index SHTML files, if you add the following rule to the permission.lst file:

```
allow: \.[sS][hH][tT][mM][lL]?$
```

## proxy.cfg

You can edit this file in a text editor.

The proxy.cfg file is an HTTP proxy firewall configuration file associated with the proxy\_connection\_config parameter in the spider.cfg file. You need to set up the file only if you have an HTTP proxy firewall (not if you have a SOCKS firewall). It is used to determine whether a URL should be fetched by

the HTTP proxy server or by direct connection. If proxy\_connection\_config specifies a file and that file is left empty, then all URLs will be retrieved through the HTTP proxy server. See Firewall setup on page 79 for more information.

To directly fetch a URL that matches a regular expression, precede the regular expression with direct: in the proxy.cfg file. To use the HTTP proxy server to fetch a URL that matches a regular expression, precede the regular expression with proxy:. If a URL is matched by both a direct and a proxy statement, the proxy statement has priority.

For example, below is a proxy.cfg file where all traffic going to convera.com will be via direct connection while traffic going to example.com will be through the HTTP proxy server.

```
# Convera Internet Spider Proxy Configuration
direct: convera.com
proxy: example.com
```

## revisit.cfg

You can edit this file in a text editor.

The purpose of the revisit.cfg file is to set a schedule to revisit the URLs that have already been visited. The file is named in the revisit\_control\_file parameter of the spider.cfg file.

Below is an example of revisit.cfg:

```
#-----
# Transfer Frequency Control File
#-----
# The following parameters are in days
# Number of days to wait before attempting to crawl a
# URL that had not changed last time.
no_change_revisit: 0
# Number of days to wait before attempting to crawl a
# URL that had changed last time.
change revisit: 0
# Number of days to wait before attempting to crawl a
# URL that was not found last time.
extinct revisit: 0
# Number of days to wait before attempting to crawl a
# URL that had been moved last time.
moved revisit: 0
# Number of days to wait before attempting to crawl a
# URL that timed out during trnasfer last time.
timed out revisit: 0
# Number of days to wait before attempting to crawl a
```

```
# URL that encountered a transfer error the last time.
transfer error revisit: 0
# Number of days to wait before attempting to crawl a
# URL for which access was denied the last time.
access_denied_revisit: 0
#______
# Special Revisit configuration
# The precedence is in reverse order of entry. So if there is a
# conflict, the last setting takes precedence
#-----
#retrieve frequency: 5: http://www\.example\.com/
#retrieve_once: http://www.example.com/icons/2s_abt.jpg
#retrieve_always: http://www\.example\.com/prods.html$
#retrieve_normal: http://www\.example\.com/client.html$
```

There are two types of revisit timers: general (for all URLs), and specific. You can set how often all URLs should be revisited and reprocessed by setting the general timing parameters. To control how often a specific set of URLs are revisited, set the specific timing parameters. The parameters that can be set for these timers are listed in charts in the next two sections.

Timing parameters should be entered from general to specific. In the revisit.cfg file, general timers should be placed first, followed by the specific timers. The precedence is in reverse order of entry in the file. If there is a conflict, the last setting takes precedence.

#### General revisit timers

General revisit timers indicate the number of days (fractional days are allowed) to wait before revisiting URLs. Use these timers if your system contains one Spider library or if it contains multiple Spider libraries that do not visit the same sites. If you are crawling over multiple libraries that may be crawling the same sites, you may wish to use only the specific timer retrieve\_always. (See the next section Specific revisit timers for more information.)

If the revisit.cfg file does not exist, the timers will be set to the default values given in the chart below. Use these parameter descriptions to modify the sample revisit.cfg file for your crawl:

<b>General Revisit Timers for all URL</b>	5
---	---

Parameter name	Default (days)	Description
change_revisit	1	URLs that were new or had changed on the last visit.
access_denied_revisit	5	URLs that were denied due to invalid or no user ID or password.
extinct_revisit	30	URLs that were marked bad by HTTP return code (404, for example) on the last visit.
moved_revisit	0	URLs that were marked moved by HTTP return code (301, 302) on the last visit.
timed_out_revisit	5	URLs that timed-out during the last transfer.
transfer_error_revisit	5	URLs with transfer errors other than timing out (couldn't connect, couldn't find host, and so on) during the last transfer.

### Specific revisit timers

Specific revisit timers affect a specific set of URLs through special regular expression directives similar to how the permission. Ist works. The chart that follows contains a list of the directives and their meaning. Each directive should be followed by a colon (:) and a regular expression that matches the URLs for which this directive applies.

If you have multiple Spider libraries, in order to crawl and index URLs that have already been visited for another library,

set retrieve\_always to "retrieve\_always:.\*" and do not set the other specific timers. This change ensures that no documents will be skipped during the crawl, but it also may cause the crawl to take longer.

Use the parameter descriptions in the chart below to modify the sample revisit.cfg file for your crawl:

**Specific Revisit Timers for Specified URLs** 

Parameter name	Default (days)	Description
retrieve_once	none	Retrieve the URLs that match the regular expression only once during the lifetime of the Spider database.
retrieve_always	none	Retrieve and re-index URLs that match the regular expression on every crawl.
retrieve_frequency: #:	none	Retrieve the URLs that match the regular expression at the specified interval where "#" is the minimum number of days between transfers of a URL. For example, retrieve_frequency: 5.0: http://www\.example\.com/ means retrieve the "example site every 5 days.
retrieve_normal	none	Normally retrieve the URLs that match the regular expression; that is, use the rules from the general timers. If the general timers are all 0 (expired) then the URLs will be visited and indexed on every crawl. This parameter is intended to be used for exceptions to a more abstract regular expression.

For example, the following parameters mean that everything on the "example" site should be crawled every five days. GIFs and JPEGs are transferred only once, **todays\_news.html** are transferred every crawl and all of the files in the /Example/ directory are transferred using rules in the general timers.

```
retrieve_frequency: 5.0: http://www\.example\.com/
retrieve_once: \.[gG][iI][fF]$
retrieve_once: \.[jJ][pP][eE]?[gG]$
retrieve_always: ^http://www\.example\.com/todays_news.html$
retrieve_normal: ^http://www\.example\.com/Example/
```

If a URL is not crawled because its revisit time has not yet arrived, its forward links are still followed.

### forms.lst

Spider can automatically fill out forms and can provide an ID and password to hosts that request authentication. Forms and authorization are configured through a file called forms.lst. You only need to include this file if you will be processing web forms. The file is named in the form file parameter in spider.cfg. We recommend the form file listed in parameter form file be located in the following directory: ware/spider/libname/config/forms.lst.

Copy the sample forms.lst file from rware/spider/sample/config/forms.lst to your library directory rware/spider/libname/config/forms.lst and use it as a starting place. Edit it to your specific needs. Remember to obtain IDs and passwords from sites whose forms you will be processing. You may list any number of sets of values for a form, and the Spider will crawl all of them.

### CGI forms submission

To use the automatic forms submission feature, you must be familiar with the HTML <form> syntax. For more information, see "Mosaic for X version 2.0 Fill-Out Form Support" at the following site:

http://www.ncsa.uiuc.edu/SDG/Software/Mosaic/Docs/fill-out-forms/ overview.html

When using the automatic forms submission feature, you must also set up the following:

1 In the permission.lst file, insert the following line, because all processed form URLs will end in

```
FORM:
allow: FORM$
```

2 In the revisit.cfg file, set both of these parameters to 0:

```
transfer error revisit: 0
timed out revisit: 0
```

The following is the syntax of the configuration parameters in forms.lst for automated forms submission:

```
form: regular expression for the URL for form 1
submit: submit button value to be used for form 1
field: field name 1= value1
field: field name 2= value2
form: regular expression for the URL for form 2
submit: submit button value to be used for form2
field: field name 1= value1
```

. . etc.

The **field:** value corresponds to the name field of each <input> syntax and the **submit:** value corresponds to the value field of <input type=submit value="...">.

Whenever a URL is transferred, it is compared against the regular expression in the **form:** field. If there is a match, then the HTML page is parsed and all of the <FORM>s are extracted. All fields are set to their default values unless specifically set in the field: parameters. The **submit:** field must exist since it is the mechanism by which Spider distinguishes between different forms on the same HTML page.

Currently there is no support for de-selecting default selections in multiple-select objects such as check-boxes and multi-select boxes.

For example, below is the section of a forms.lst file that automates filling out a form.

### Setting authorization

The user authorization feature is the most common way of crawling password protected sites. Normally when you're using a browser, a window will pop up to ask your user name and password before accessing a certain page. For more information about authorization, see the following site:

http://www.w3.org/Protocols/HTTP/1.0/spec.html#Authorization.

User authorization is set in the form.lst file with the following format:

```
authorization: regular-expression user-ID: password
```

When a URL matches the regular expression given in the first argument, the user ID and password are given to the HTTP server. Notice the regular expression and ID: password must be separated by a space. The user ID and password are actually a united field used for the authorization. They must appear on the same line (not broken by blanks, carriage returns, or any other characters). Spider only supports the "basic" authorization method.

For example, below is the section of a forms.lst file that sets authorization.

```
#-----
# User authorization based login
#------
authorization: www\.example2000\.com/~wsapi/investor/
my_name:my_passwd
```

You can also set up FTP user authorization information in the forms.lst file. For example:

```
authorization: www\.example2000\.com/~wsapi/investor/
my_name:my_passwd
```

- The FTP login information is determined as follows:
- If the URL contains user information, use it (as in, ftp://user:passwd@ftp.example.com/).
- Otherwise, use the user information in the authorization configuration file, if a match is found.
- If no login information is found in those two sources, the user is "anonymous" and the password is the "From" parameter in the main configuration file.

### cookies

A cookie is a piece of limited, internal information transmitted between the host server software and the browser application. This is an optional file to initialize and save the cookies used by Spider. If the cookie file is not provided, Spider still sends and receives cookies, but the cookies will not be saved when the server is shut down. tagent reads the cookie file at startup time and saves cookies when it shuts down.

We do not provide a sample cookie file, but you should be able to copy the cookie file from your browser if you want to give Spider a initial cookies file. For example, if you don't want to store authorization information in forms.lst, you could authorize yourself through Netscape and use the Netscape cookie file to start the crawl. The file is named in the cookie\_file parameter in spider.cfg.

### **Extended regular expressions reference**

Regular expressions are used in the following configuration files: permission.lst

proxy.cfg

revisit.cfg

form.lst

The following chart shows commonly used extended regular expressions. Solaris users can also refer to "man -s 5 regex" man pages.

Characters	Meaning	Example
۸	Regular expression must match from the beginning of the string.	^http : matches all strings beginning with http :
\$	Regular expression must match at the end of the string.	html\$ matches all strings ending in html
\	Negates all special meaning for the following character.	\\$ matches the \$character
	Matches any 1 character	welcome. matches welcome1, welcomeb, welcome? and any other string with welcome followed by any 1 character
*	Matches 0 or more of the preceding characters.	welcome* matches welcom, welcome, welcomee, welcomeee, etc.
+	Matches 1 or more of the preceding characters.	welcome+ does not match welcom, but does match welcome, welcomee, welcomeee, etc.

Characters	Meaning	Example
?	Matches 0 or 1 of the preceding characters.	html? matches only htm and html.
	All characters within the []s are considered to be a character class. It will then match any single characters contained within the []. All characters lose their special meaning within the [^].	[a-zA0-9\n] matches all alphanumeric characters plus the carriage return.
[^]	All characters within the []s are considered to be a character class. It will then match any single character not contained within the [^]. All characters lose their special meaning within the [^].	[^a-zA-Z0-9\n] matches all characters except for alphanumeric characters and a carriage return.

## Firewall setup

Spider supports two kinds of firewalls:

- SOCKS (UNIX only)
- HTTP proxies (both UNIX and NT)

### Determining your firewall type

You can usually find out what kind of firewall you have from your network administrator. If the administrator is not available, check for the following:

- 1 If you have an /etc/socks.conf file then you most likely have a SOCKS firewall.
- 2 You can also look in your Netscape browser's network proxy configurations to determine the kind of firewall you have. If your HTTP Proxy field is set, then you should use the HTTP proxy parameters. If your SOCKS "Host:field" is set, then you should choose the SOCKS option.

### SOCKS setup

You will need to set the SOCKS\_SERVER environment variable to the IP address (not the hostname) of the machine that your SOCKS server is running on.

For example, if your SOCKS\_SERVER is running on host proxy.mycompany.com, you can find out the IP address like this:

```
> telnet proxy.mycompany.com
Trying 123.45.67.8...
```

The IP address in this case is 123.45.67.8. You will then need to set the environment variable SOCKS\_SERVER. The command you use depends on what shell you use:

```
Shel Command
csh or tcsh > setenv SOCKS_SERVER 123.45.67.8
ksh or bash > export SOCKS SERVER=123.45.67.8
```

### **HTTP** proxy setup

The HTTP proxy support is toggled on and off through three parameters set in the spider.cfg file:

proxy\_host, proxy\_port, and proxy\_connection\_config.

If either the proxy\_host or proxy\_port parameters are not set, then this feature is disabled. All of these parameters are located in the spider.cfg configuration file. The proxy\_connection\_config specifies an additional configuration file, proxy.cfg, that defines when to use the proxy.

### **Clearing KMspider indexes**

If necessary, you can clear the all the indexes/URLs in the Spider database.

### To clear KMspider indexes:

- 1 Stop all Spider processes and the search engine.
- 2 Open a command prompt and type dbmanage -dbclear.
- 3 In the system utilities menu, delete and clear indexes for KMSpider.
- 4 In the system utilities menu, delete any log files as needed.

## Integrating Get-Answers with AssetCenter

The information in this section is intended only for administrators who are configuring Get-Answers to work with Peregrine's AssetCenter, an asset management product.

Integrating Get-Answers in AssetCenter enables you to search the Get-Answers knowledge base. This integration is available in Get-Answers versions 4.0 and higher.

**Note:** The integration is functional only if the user has local administrative rights on the client computer.

### To use the integration:

- 1 Copy and execute the file, jcinst.exe, on the Get-Answers server and then copy and execute this file on each client that will access Get-Answers.
  - This file is usually located in the following folder:
  - c:\Program Files\Peregrine\Common\Tomcat4\webapps\oaa\integrations\
- **2** Follow the installation instructions given by the program, jcinste.exe.
- 3 Start your Web browser with the following address:

http://<Get-Answers server>/oaa/login.jsp?\_bookmark=e\_answers\_kmSearchAlternate\_basicSearch.jsp?D DEType=SC

This completes integration of AssetCenter with Get-Answers.

## **Using Crystal Reports with Get-Answers**

You can use Crystal Reports to provide summary reports and metrics relating to how the Get-Answers application is being used by your organization. The installation CD contains four reports meant for out-of-box use or customization by your Crystal Reports administrator. The four reports are:

- Document Usage Metrics this report identifies the documents most often accessed and provides metrics relating to the usefulness of each document.
- Document Team Performance Metrics this report shows number of documents published by document team and includes metrics for documents modified, submitted, and retired.
- User Performance Metrics this reports shows how individual users accessed documents and includes metrics for queries, documents read, and user feedback.
- Document Users, Usage Metrics this reports shows which documents users accessed most often, and how they rated the usefulness of these documents.

Each report is self-contained, has a prompt for usage and date range, has standardize formulas, and has an ERD. The reports can be exported and published in html.

In order to use these reports you need to:

- Have the Crystal Reports application.
- Copy the four files (.rpt) from the **sample reports** folder within the documentation folder on the installation CD to a server/directory where Crystal Reports can access them.
- Set up an ODBC connection between Crystal Reports and your Get-Answers Oracle database.

## **2** Using the Peregrine Portal

The Peregrine Portal includes a Navigation menu, an Activity menu, and buttons that enable you to customize your Portal and to end your session.

Your installed Web applications determine the contents of the Navigation menu. However, if you log in as an administrator, all Navigation menus include an Administration tab that provides access to the Admin module.

The graphics in this chapter use the Classic stylesheet and are examples of a generic interface. Also, the Admin module displays only those features that Get-Answers uses. For more advanced changes to the portal, see the chapter on Customizing the Peregrine Systems Portal.

Topics in this chapter include:

- Logging in to the Peregrine Portal on page 84
- *Using the Activity menu* on page 85
- Personalizing the Peregrine Portal on page 86

## **Logging in to the Peregrine Portal**

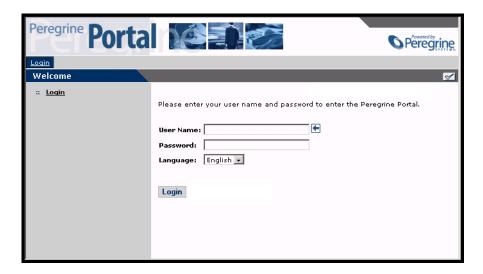
There are two login screens that provide access to the Peregrine Portal:

- A user login screen—http://<server>/oaa/login.jsp
- An administrator login screen—http://<server>/oaa/admin.jsp

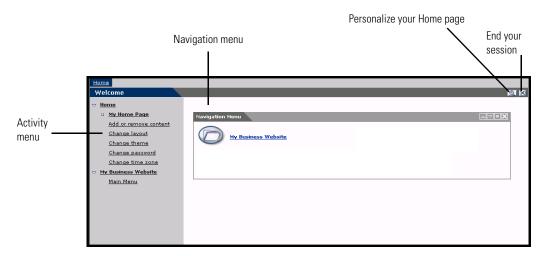
**Note:** An alternative to this login method is the Integrated Windows Authentication. See the *Security* chapter of this guide.

**Note:** This chapter discusses the features available with a user login. For more information about the administrator login, see the chapter on *Get-Answers Administration* in this guide.

The following is an example of the user login interface. Enter your user name and password. In the **Language** pull-down list select the language that you want the Peregrine Portal to display. English is the default login language, but you can enable other languages in the **Settings** page of the Administration Control Panel. For more information about enabling login languages, see the section *Choosing a Login Language* on page 139.



The following graphic shows a Portal without any applications installed. The Navigation menu includes modules for your particular application. All applications have the Admin module.



## **Using the Activity menu**

The Activity menu provides access to a number of tasks as you navigate through your Web application. The menu remains visible as you change screens.

The default Activity menu includes the following choices:

Use this option	When you want to
My Home Page	Return to the Peregrine Portal Home page.
Add or remove content	Access the same page as the Personalization button, allowing you to customize your Home page.
Change layout	Change the location of a component or remove it from the Peregrine Portal.
Change theme	Select from several options. Changes take effect immediately after selecting a value in any of these fields.
	<b>Note:</b> Select the accessible theme to access the alternate text-based interface.
Change time zone	Select the time zone.

## **Personalizing the Peregrine Portal**

By default, the Navigation menu is displayed on the Peregrine Portal. You can personalize the Peregrine Portal to add Get-Answers utilities as well as personal tools such as a calendar, calculator, or the date and time. You can also change the layout of these components or minimize a component to hide the component details.

See the chapter on *Using the Personalization Interface* in this guide for more information on personalization.

## **Adding components**

The following components are available:

### **Personal Utilities**

This component	Provides
Calculator	A tool using standard arithmetic functions.
Calendar	A monthly calendar.
Theme Selector	A drop-down list to change themes.
Date and Time	A date and time display for the local time zone.

### Peregrine Portal Web application components

This component	Provides
Navigation Menu	Quick links to the various modules that make up this application.
Document List	A display of a document search, list, or detail screen. Configure the component by choosing the document type you want to expose and the type of screen desired.
My Menu	A menu of links that can be configured dynamically. Links can point to arbitrary web sites, other menus, or document explorer screens.

**Note:** The Calendar and Calculator require Microsoft Internet Explorer 5.0+ or Netscape 6.1+.

### **Administration components**

Only users with Admin capability have access to the Admin components.

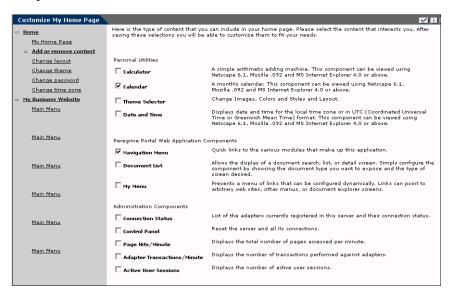
This component	Provides
Connection Status	A list of the adapters currently registered in this server and their connection status.
Control Panel	A button to reset the server and all its connections.
Page Hits / Minute	A list of the total number of pages accessed per minute.
Adapter Transactions / Minute	A list of the number of transactions performed against adapters.
Active User Sessions	A list containing the number of active user sessions.

### To add Peregrine Portal components:

1 Click the Personalize (wrench) icon.

**Note:** You can also select the **Add or remove content** link from the Activity menu.

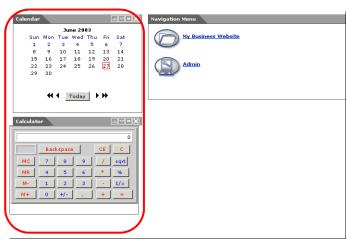
The Customize My Home Page opens containing a list of the available components.



- 2 Select the components you want to add to your Peregrine Portal.
- 3 When you complete your selections, scroll to the bottom of the page, and then click Save. To return to the Peregrine Portal without making any changes, click Go Back.

When you return to the Peregrine Portal, the new components are displayed. The following example shows the Calendar and Calculator added to the Portal.

The Calendar and Calculator components display on the Home page after personalization.

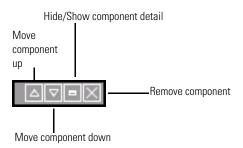


## Changing the layout

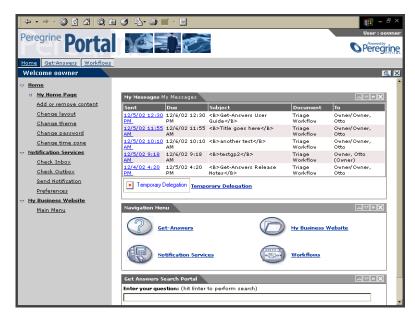
The following sections contain procedures for changing the location of the components or removing them from the Peregrine Portal. The procedure you use is determined by the Web browser you are using.

### Microsoft Internet Explorer

If you are using Microsoft Internet Explorer as your Web browser, use the buttons in the upper right corner of each component to move the component up or down, remove the component, or hide/show the component detail.



In the following screen, the Calendar is minimized.



### **Netscape Navigator**

change.

If you are using Netscape Navigator as your Web browser, use the following procedure to change the status of the components on the Peregrine Portal. You can move a component up or down, or remove the component.

1 From the Activity menu, select Change layout. A Change Layout page opens where you select the components you want to

Change Layout My Home Page To change the layout of your page, simply select a component and use the up or down arrow buttons to move it as desired. Add or remove content :: Change layout Narrow Components (shown on the left) Change theme Calendar Calculator Change password X My Business Website Main Menu Wide Components (shown on the right) **-**Navigation Menu X

Components can be Narrow (for example, Calendar or Calculator) and are on the left side of the Peregrine Portal. Other components (for example, Navigation Menu) are Wide and are on the right side of the Peregrine Portal.

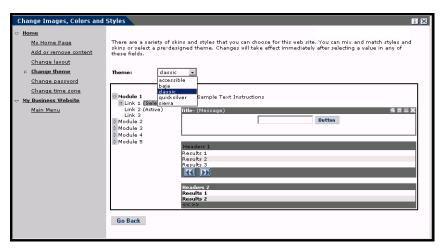
- 2 Select the component you want to modify, and then click the appropriate button to activate the change.
  - Up arrow moves the component up.
  - Down arrow moves the component down.
  - X removes the component from the Peregrine Portal.
- 3 Click Save.

## Changing themes

You can choose from a number of themes to change the look of your Web pages. Out of the box, Get-Answers provides five themes you can choose between. If you want to deploy additional themes, refer to Customizing the Peregrine Portal.

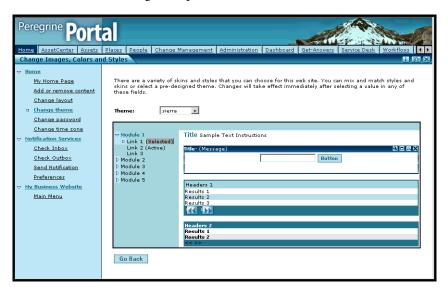
### To change the theme:

1 From the Activity menu on the Portal Home page, select Change theme. The following page opens.



**2** Choose from the drop-down list.

As soon as you make your selection, the page updates to reflect your selection. The following example shows the Sierra theme.



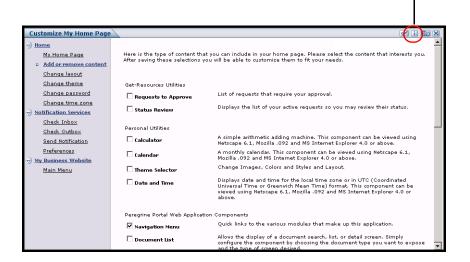
This new configuration remains through subsequent work sessions until changed.

## Displaying form information

You can view information about the form you are using. Set this parameter from the Logging tab on the Settings page of the Admin module. See the Get-Answers Administration chapter in this guide for more information.

When the Show form info parameter is set to Yes, a Display Form Info button appears on the upper right corner of forms.

> The Display Form Info button shows information about the form you are using.



# Customizing the Peregrine Portal

Peregrine OAA provides a number of ways to customize the interface of an application built on the platform. You can make a quick change, such as replacing the logo with your company logo, or a more complex change such as rewriting the code that defines layer placement or frameset size.

This chapter includes advanced procedures for changing the Peregrine Portal interface. To use this information effectively, you should have knowledge of XML and the CSS2 specifications established by the W3C as outlined at www.w3.org.

Topics in this chapter include:

- *Deploying the Classic theme variations*
- Changing the default theme
- *Changing the header graphic for all themes*
- *Creating a custom theme*
- Layers properties
- Changing framesets
- *Translating Get-Answers*

## **Deploying the Classic theme variations**

The Classic theme is the default theme that applications built on Peregrine OAA use. It has a gray and teal design and is the theme shown in all the screenshots in the guide. This is the theme you will use to create a customized theme for your enterprise.

There are four variations of the Classic theme:

- *Accessible*, which makes the screen available to users who need high contrast colors or better accessibility support.
- *Baja*, which adds southwestern green and beige hues to the Classic design.
- *Quicksilver*, which adds silver and blue hues to the Classic design.
- *Sierra*, which adds teal hues to the Classic design.

These themes, as well as a number of other optional themes, are deployed with the application installation. Once you create your customized theme, Peregrine Systems recommends that you delete all other themes to prevent users from selecting one of them and overriding your custom theme. If you decide later that you want to manually deploy a theme that has been deleted, or if you did not deploy all themes during the installation, use the following procedure to deploy the themes. The additional themes are zip files located in the C:\Program Files\Peregrine\oaa\packages directory. You can identify the theme names from these zip file names.

### To deploy an alternate Classic design:

- Open a command prompt window, and change directories to your oaa\packages directory. The default path is:
   C:\Program Files\Peregrine\oaa\packages
- 2 Type:

```
java -jar OAADeploy.jar <name of the theme>
```

**Note:** List each theme you want to deploy, separated by a space; for example, java -jar OAADeploy.jar bluestheme hightechtheme bajatheme.

- 3 Press ENTER.
- **4** Stop and restart your application server.

  The themes you deployed appear as options the next time you log in to Get-Answers.

## Changing the default theme

You can change the default theme that all users see when they log in to Get-Answers. Out-of-the-box, the default theme is classic.

### To change the default theme:

- 1 Open your Web browser and log in to the Admin module (localhost/oaa/admin.jsp).
- 2 Click Settings > Themes. Change the following parameters:
  - a In the Default skin/Theme field, change the parameter to the name of the theme you want to use (for example, *Baja*).
  - **b** In the Default stylesheet field, change the parameter to the appropriate name for the CSS file (for example, baja.css).
  - c In the Default XSL stylesheets field, change the parameter to the name of the theme you want to use (for example, *Baja*).
- **3** Scroll to the bottom of the page, and then click **Save**.
- **4** When the Control Panel opens, click **Reset Server**.
- 5 Refresh your browser to see the new default theme.

## Changing the header graphic for all themes

You can add your corporate logo to all themes in the Peregrine Portal from the Administration Settings page.

**Warning:** The administration setting discussed below overrides the image used by all themes. If you change this setting then you will see the same logo in all themes. If you want to use a different corporate logo for each theme, see *Creating a custom theme* on page 99.

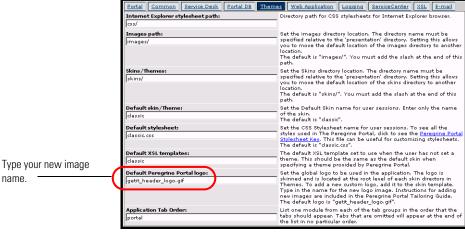
### To change the header graphic for all themes:

1 Create a custom header graphic.

**Note:** To fit within the default header frame, your customized header logo must be 514 pixels wide and 59 pixels high. If you want to change the header frame size, see Changing framesets on page 104.



- 2 Save your custom header graphic to the following location: C:\Program Files\Peregrine\Common\Tomcat4\\webapps\oaa\images\skins\classic **Note:** The Classic theme is the default theme.
- 3 Log in to the Get-Answers administration page (admin.jsp).
- 4 Click Settings > Themes.
- 5 In the Default Peregrine Portal logo field, enter the name of your custom header logo.



- **6** Scroll to the bottom of the page, and then click **Save**.
- 7 When the Control Panel opens, click **Reset Server**.
- 8 Refresh the browser to view your changes.

## Creating a custom theme

You can create custom themes by copying and modifying the classic theme provided with Get-Answers.

### To create a custom theme:

- 1 Copy classic theme images, stylesheets, and XSL templates. These files are located at:
  - Images. <application server>\oaa\images\skins\classic
  - Stylesheets. <application server>\oaa\css\classic
  - XSL templates. <application server>\oaa\WEB-INF\templates\classic
- 2 Paste and then rename the folders for the classic theme to a new name. For example:
  - Images. <application server>\oaa\images\skins\myTheme
  - Stylesheets. <application server>\oaa\css\myTheme
  - XSL templates. <application server>\oaa\WEB-INF\templates\myTheme
- 3 Open and edit each image that you want to change in your new theme. Use the following image conventions.
  - Image file names must remain the same. Get-Answers uses these image names to display theme elements.
  - Image height and width should remain the same unless you are also changing the size of the framesets to accommodate new image sizes.
- **4** Open and edit the classic.css file in your new theme.

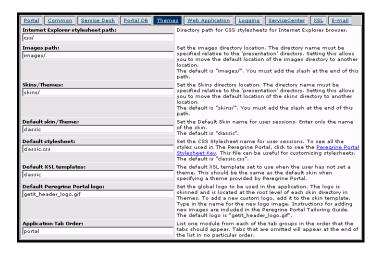
The following table lists some of the more commonly modified styles.

Style Name	Style Description
.ActionButton	The style used on buttons throughout the Portal.
.ActiveMenuLink	Used when the mouse hovers over a menu link.
.ActiveModuleMenu	Designates the currently-selected page within the navigational subset.
.CurrentModuleMenu	Designates the currently-selected navigational subset.
.FormTitle	Used for the title of forms. Normally used to title DocExplorer window content.

Style Name	Style Description
.ListboxEvenRow	A bolded version of TableEvenRow.
.ListboxHeading	A bolded version of Table Heading.
.ListboxOddRow	A bolded version of TableOddRow.
.MenuLink	Used within all module menus.
.ModuleMenu	Used for the left-hand navigational menu.
.ModuleMenuTitle	Designates the navigational subsets title.
.PageTitle	Used on the page title located directly below the logo and tabs.
.TableEvenRow	Used within the table heading with alternating background colors for ease of reading. Has a background color of white.
.TableHeading	Used for application headings for both search and results functions.
.TableOddRow	Used within the table heading with alternating background colors for ease of reading. Has a background color of light gray.
a.ListBoxEvenRow	Designates the style with a link attribute.
a.ListBoxOddRow	Designates the style with a link attribute.
a.TableEvenRow	Designates the style with a link attribute.
a.TableOddRow	Designates the style with a link attribute.

**Tip:** Modify the style sheets after you complete your overall theme design. Use your image editor's color picker to ensure that the your stylesheet colors match your image colors.

**Note:** You can see a detailed stylesheet key in the themes Administration section of the Portal. To access the stylesheet key, locate the Default stylesheet field on the Themes tab of the Admin Settings page and click the **Peregrine Portal Stylesheet Key** link.



- **5** Save your theme stylesheet with the same name as your new theme. For example, <application server>\oaa\css\myTheme\myTheme.css.
- 6 Open and edit the layers\_<xx>.jsp file to change any layer descriptions.

  To change layers for Internet Explorer, open layers\_ie.jsp. To change layers for Netscape open layers\_gecko.jsp extension.

  For more information about editing layers see *Layers properties* on page 103.
- 7 Open and edit any XSL stylesheets you want to change.

**Warning:** Do not change these files unless you have knowledge of XSL and HTML transformation.

The XSL stylesheets determine how Get-Answers displays form components in the main portal frame.

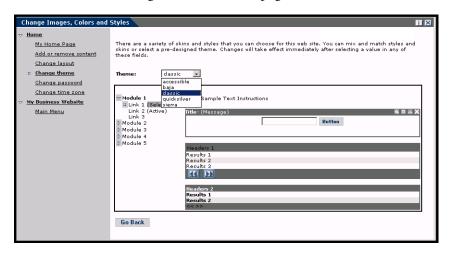
The following table lists the XSL stylesheets you can change.

To change	edit this XSL stylesheet
Attachment picker	attachments.xsl
HTML form generation	basic-form.xsl

To change	edit this XSL stylesheet
Action (button) properties	button.xsl
Template components	components.xsl
Debugging message properties	copy_nodes.xsl
Date-time picker properties	datetime.xsl
Text edit field properties	edit_fields.xsl
Entry table form component (see administration page for examples)	entrytable.xsl
Field section properties	fieldsection.xsl
Field table properties	fieldtable.xsl
HTML page generation	form.xsl
Frameset properties	frames.xsl
Images properties	image_fields.xsl
Label properties	labels.xsl
Link properties	link.xsl
Building of DocExplorer lists	list-builder.xsl
Lookup field properties	lookup_fields.xsl
Money text field properties	money_fields.xsl
Portal properties	portal.xsl
Radio checkbox properties	radio_checkbox_fields.xsl
Read-only text field properties	readonly_fields.xsl
Select text field properties	select_fields.xsl
Spinner properties	spinner_fields.xsl
SVG image properties	svg_cad.xsl
Table properties	table.xsl
Navigation tab properties	tabs.xsl

<sup>8</sup> Stop and restart your application server.

You can view your new theme by selecting it from the *Change theme* page, available from the Peregrine Portal Home page.



## Layers properties

The following sections describe the layers\_ie.jsp and layers\_gecko.jsp files. Each layer is defined by a separate <div> tag entry and includes an id attribute that names the layer. You can change layer properties as needed, but the following layers are required and should not be removed:

### logo

```
<div id="logo" style="position:absolute; left: 0px; top: 0px; width:
100%; height: 40px; z-index: 3;">
<img name="logo" border="0" src="<%= logo %>" alt="logo">
</div>
```

#### time

```
<div id="time" style="position:absolute; right: 4px; top: 84px;
width: 100%; z-index: 13;" onmouseover="_pauseAlert()"
onmouseout="_startAlert()" class="userBarText">
</div>
```

### toolbar

```
<div id="toolbar" style="position:absolute; width: 50px; top: 59px;
right: 0px; z-index: 12;"></div>
```

### user

```
<div id="user" style="position:absolute; top: -4px; right: 0px;</pre>
z-index: 14;">
align="right">
 
<img src="<%= Archway.getSkinImagePath("backgrounds/rt_l.gif", user )</pre>
%>">
Archway.getSkinImagePath("backgrounds/rt_tile.gif", user ) %>">
<img src="<%= Archway.getSkinImagePath("backgrounds/rt_tile.gif",</pre>
user ) %>">
<font class="userBarText" size="1" face="Arial, Helvetica,</pre>
</div>
tabs
<div id="tabs" style="position:absolute; left: 0px; top: 60px; width:</pre>
100%; z-index: 11;" >
</div>
form titles
```

```
<div id="formTitles" style="position:absolute; left: 10px; top: 81px;</pre>
width: 200px; z-index: 16; "> 
</div>
```

## Changing framesets

**Important:** You must have advanced knowledge of HTML, JSP, and framesets to modify these files. Keep all of the frames and do not change the names of any of the frames. Doing so will result in JavaScript errors.

There are two framesets to be modified for each browser. These files are in C:\Program Files\Peregrine\Common\Tomcat4\webapps\oaa\images \skins\<your theme>.

The frames xx.jsp files are for the pages that you access when logging in as an end-user (login.jsp). The admin frames xx.jsp files contain the configuration for the Admin module (accessed when you log in using admin.jsp).

### To change framesets:

- 1 Stop your application server.
- 2 Open the browser-specific frameset file frames <xx>.jsp in a text editor (where **<xx>** is ie for Internet Explorer and gecko for Netscape).
- **3** Modify the frameset properties.
- 4 Save the file.
- **5** Restart your application server.

You can now test your changes in your Web browser.

The following sections show the complete ie.jsp files as examples of the frameset files.

### frames ie.jsp

```
<%@ include file="../../jspheader_2.jsp" %>
<%@ include file="../../message_special.jsp" %>
<frameset onload="setTopFrames()" onunload="closeChildWindows()"</pre>
border="0" framespacing="0" frameborder="NO" cols="*" rows="102,*">
  <frame scrolling="NO" marginwidth="0" marginheight="0"</pre>
src="oaa_header.jsp" name="getit_main_head">
    <frameset cols="185,10,*" rows="*" frameborder="no" border="0"</pre>
framespacing="0">
      <frame scrolling="AUTO" marginwidth="0" marginheight="0"</pre>
src="apphead.jsp" name="getit_header">
      <frame name="framesep" scrolling="no" marginheight="0"</pre>
marginwidth="0" src="framesep.jsp">
       <frameset rows="*,0">
          <frame scrolling="AUTO" marginwidth="6" marginheight="6"</pre>
src="e_login_main_start.jsp?<%= user.getADW(msg,"Params" ) %>"
name="getit_main">
          <frame noresize scrolling="NO" marginwidth="0"</pre>
marginheight="0" src="backchannel.htm" name="backchannel">
         </frameset>
     </frameset>
</frameset>
```

### admin\_frames\_ie.jsp

```
<%@ include file="../../jspheader_2.jsp" %>
<%@ include file="../../message_special.jsp" %>
```

```
<frameset onload="setTopFrames()" onunload="closeChildWindows()"</pre>
border="0" framespacing="0" frameborder="NO" cols="*" rows="102,*">
  <frame scrolling="NO" marginwidth="0" marginheight="0"</pre>
src="oaa_header.jsp" name="getit_main_head">
    <frameset cols="185,10,*" rows="*" frameborder="no" border="0"</pre>
framespacing="0">
     <frame scrolling="AUTO" marginwidth="0" marginheight="0"</pre>
src="apphead.jsp" name="getit_header">
      <frame name="framesep" scrolling="no" marginheight="0"</pre>
marginwidth="0" src="framesep.jsp">
       <frameset rows="*,0">
          <frame scrolling="AUTO" marginwidth="6" marginheight="6"</pre>
src="e_adminlogin_login_start.jsp?<%= user.getADW(msg, "Params") %>"
name="getit_main">
         <frame noresize scrolling="NO" marginwidth="0"</pre>
marginheight="0" src="backchannel.htm" name="backchannel">
        </frameset>
    </frameset>
</frameset>
```

## **Translating Get-Answers**

Out-of-box, all Peregrine OAA web applications are provided in English. You can order translated versions of the core Peregrine OAA web applications by purchasing a language pack. Peregrine OAA 4.1.2 language packs are available for the following languages:

- French
- Italian
- German

**Note:** Not all Peregrine OAA web applications will offer language packs. Refer to the Peregrine support web site to determine the availability of language packs for your Peregrine OAA web applications.

If you have a language pack version of Get-Answers, you need to add the Locale field to four of the sample document creation screens.

If you have a language pack version of a Peregrine OAA web application, you will need to edit the existing string files for these applications and add any new strings that resulted from your tailoring efforts. For more information on the process, refer to *Editing existing translation strings files* on page 107.

If you do not have a language pack version of your Peregrine OAA web applications and you want to create a new translation, refer to the instructions in *Adding new translation strings files* on page 108.

To configure the Peregrine OAA Platform to use your new translation, see *To configure the Peregrine OAA Platform to use new string files:* on page 109.

### Adding the Locale field to document creation screens

If you are deploying the FIG (Internationalization) release, add the Locale field to every Document creation screen except for External Document Type creation screens. This Locale field is necessary to expand search terms in the correct language.

## For each of the Document Types (except External), complete the following steps:

- 1 One by one, open each Document creation screen for that Document Type. Find these by selecting Contribute New Document and then selecting the document type.
- **2** Click the **Personalization** wrench icon.
- 3 In the Available Fields list on the left, select Locale.
- 4 Place the cursor in the Current Configuration list on the right where you want to insert the Locale field.
- 5 Click the Plus icon.
- Click Save.

This personalization is stored in the database and therefore future patch deployments will not overwrite this (one-time) customization.

## **Editing existing translation strings files**

You can make edits, additions, and deletions to string files outside of Peregrine Studio using any text editor or standard translation software.

### To edit an existing translation string file:

1 Open the translated string file in a text editor or translation program. You can find all the translation string files in your application server's installation directory:

<application server>\oaa\WEB-INF\apps\<group of modules name>

**Note:** The string file will use the ISO-639 two letter abbreviation for the language in the file name.

**2** Search for an existing string that you want to change.

The string file uses the format illustrated below:

String\_label, "translated string"

Where String\_label is a unique name given to the string, and

Where *translated string* is the actual value of the string to be translated.

For example if you added a new button, you might look for:

EMPLOOKUP\_EMPLOYEELOOKUP\_SEARCH\_LABEL, "Search"

3 Change the "translated string" portion of the new string to the target language of your translation. For example, to change the string listed above to French, you might enter the following:

EMPLOOKUP EMPLOYEELOOKUP SEARCH LABEL, "Recherche"

4 Save the new string file.

The new translation strings will be available as soon as you stop and restart the application server.

## Adding new translation strings files

You can add new string files to the Peregrine OAA Platform to provide additional language support to your Get-It web applications. The translation process can be accomplished using any text editor or standard translation software.

**Important:** Peregrine does not support Get-It web applications translated into any languages other than those listed in the section *Translating Get-Answers* on page 106.

### To add an existing translation string file:

1 Open the English string file for your Studio project in a text editor or translation program.

You can find all the translation string files in your application server's installation directory:

<application server>\oaa\WEB-INF\strings

**Note:** The English string file will have the ISO-639 two letter abbreviation EN in the file name.

- **2** Copy the entire the English string file.
- **3** Create a new string file for the target language in which you want to add a translation.

**Note:** The string file must use the ISO two letter abbreviation for the language in the file name.

- 4 Paste the copied English string file into the new file.
- **5** Change the "*translated string*" portion of each string to the target language of your translation.
- **6** Save the new string file.

The new translation strings will be available as soon as you stop and restart the application server.

#### To configure the Peregrine OAA Platform to use new string files:

- 1 Log in as an administrator (the administrator login page is located at admin.jsp).
- 2 Click Settings.
- **3** Click the Common tab.
- 4 Enter the two letter ISO-639 language code for the languages you want to support in the Locales field. The first code entered will be the default language used. The other languages you define will be available in a drop-down list.
- 5 In the Content type encoding field, enter the character encoding to be used for the display language. The following table lists some of the common character encoding formats.

<b>Character Encoding</b>	Character Set	
ISO-8859-1	U.S. and Western European character sets. This is the default character set used by Studio.	
Shift_JIS	Japanese character set	
ISO-8859-2	Polish and Czech character set	

- **6** Click **Save** at the bottom of the Settings form to save your changes.
- 7 On the Console form, click Reset Server to implement your changes. Users will now be able to select the display language for their session used when they login to the Peregrine OAA Platform.

# 5 Personalization

Personalization is available to both administrators and end users in Peregrine Systems Web applications built using Document Explorers (Doc Explorers). Authorized users can change the appearance and functionality of certain Web applications directly from the application interface.

With a Personalization interface, users can add or remove fields, rearrange how fields are displayed, or add, change, or delete records from a back-end database.

#### This section includes:

- Personalization overview on page 112
- Supporting personalization on page 120
- *Personalization tasks* on page 123
- *Moving Personalizations from a development to a production environment* on page 127

#### Personalization overview

Personalization allows end users a means to create and customize searches of Get-Answers data. From the end-user perspective, personalization is a collection of standard forms that allow users to change part of the interface to suit their needs. The administrator determines which forms and features of personalization each user has by setting global personalization rights and by granting individual users capability words to do additional personalization.

From the administrator's perspective, personalization is a customization option that allows users to change the Get-Answers interface without the need to rebuild a Peregrine Studio project for every change made. Personalization enables users to add or remove fields, change the layout of a form, and change interface elements such as headers and buttons in real time using the browser interface.

#### Forms and functions

Personalization is based on a collection of forms collectively referred to as a DocExplorer. Doc Explorer forms provide the following functionality:

- A search form for defining search criteria.
- A list form for displaying search results.
- A details form for displaying detailed information about search results.

If you grant end-users administrative rights, they can also use Personalization for the following actions:

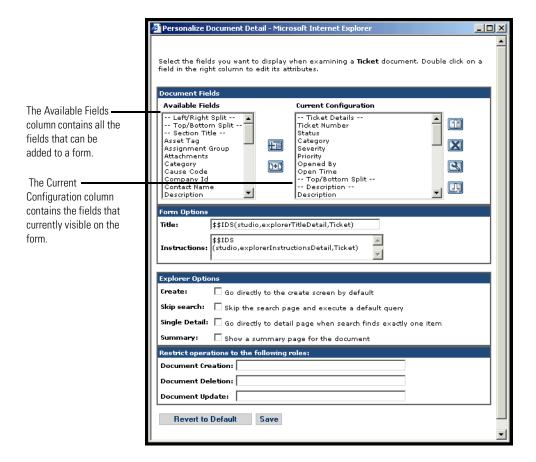
- Add a new record to the database from a creation form.
- Update existing records in the database from the detail form.
- Delete existing records from the database from the detail form.

#### Personalization interface



You can personalize any Web application interface that displays a wrench icon in the top right of the interface frame. The wrench icon will appear only in activities where a Personalization form has been defined. The Personalization form determines what options are displayed in the Personalization pop-up window.

When you click on the Personalization icon, a pop-up window opens displaying the current settings for the form you are viewing.



Administrators determine what available data fields display on each form. The wrench icon only appears in activities where a Personalization form has been defined. The Personalization form determines what options display in the Personalization pop-up window.

The form Personalization pop-up windows have the following format.

Field	Description	
Available Fields	Shows all the document fields and subdocument collections that can be added to the current form. Peregrine OAA generates the list of available fields by dynamically reading the schema that the form uses. Any items listed between dashes are form components you can use to organize and arrange how document fields are displayed in the form.	
Current Configuration	Shows all the document fields, subdocument collections, and displays components that are on the current form.	
Form Options Title Instructions	Defines the form name and specific instructions to follow when using the form.	
Explorer Options  Create Skip search Single Detail Summary	Defines how Peregrine OAA displays results. Users only see the Options section if they have administrative Personalization rights.	
Restrict operations to the following roles  Document Creation Document Deletion Document Update	Determines whether users can update, create, or delete records from the back-end database system. Users only see the Restrict section if they have administrative Personalization rights.	
Revert to Default	Removes all Personalization entered by the end user and returns the form to the default state as determined by the Get-Answers administrator or the form's schema.	
Save	Saves and applies your Personalization changes to the current form.	

#### Adding and removing personalizations

You personalize the Get-Answers pages by adding, moving, and removing fields. Select the page you want to personalize, then select the fields you want to display on the screen.

Choose a row in the Available Fields list and use the appropriate icon below to add or insert an element:

lcon	Description
1+1	The Plus (+) icon adds a component to your current configuration.
	The Insert icon adds a component in the specified place on the screen.

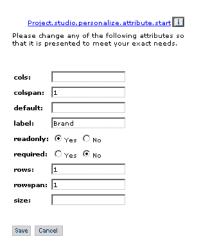
Choose a row in the Current Configuration list and use the appropriate icon below to customize the form layout:

lcon	Description
<b>U</b>	The Personalize (wrench) icon allows you to edit any attributes available for the field. The personalization options available depend on the type of element selected.
	See the following sections for more information: <i>Configuring fields</i> on page 116; <i>Configuring subdocuments</i> on page 117; and <i>Configuring collections</i> on page 119.
	The Move (vertical arrows) icons move the component either up or down on the page. Moving components is always performed with these arrows.
X	The Remove (X) icon removes the component from the page. Removing a component does not delete the component; it only does not display it.

#### **Configuring fields**



After you select a field in the Current Configuration list, click the wrench icon to configure the field's attributes:

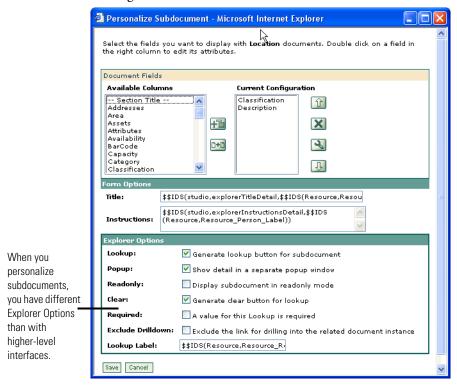


See the section *Configuring field attributes* on page 124 for more information about specific tasks. Depending on your personalization rights, you can rename the field label (see page 125), change the field to read-only (see page 125), require users to enter a value (see page 126), and change the size and span of a field (see page 126).

#### **Configuring subdocuments**



After you select a subdocument in the Current Configuration list, click the wrench icon to configure the subdocument:



Subdocuments that can be personalized contain the same icons as higher-level interfaces, including the wrench icon. However, subdocuments offer slightly different options.

Field	Description
Available Columns	Shows all the document columns that can be added to the current form. Peregrine OAA generates the list of available columns by dynamically reading the schema that the form uses. Any items listed between dashes are form components you can use to organize and arrange how document columns are displayed in the form.
Current Configuration	Shows the document columns and displays components that are on the current form.

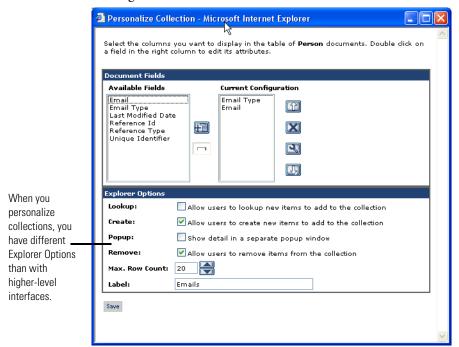
Field	Description		
Form Options Title Instructions	Defines the form name and specific instructions to follow when using the form.		
Explorer Options  Lookup Popup Readonly Clear Required Exclude Drilldown Lookup Label	Defines how Peregrine OAA displays results. Users see the Explorer Options section only if they have administrative Personalization rights.		
Save	Saves and applies your Personalization changes to the current form.		

**Note:** The first field for a subdocument is always used by the lookup for displaying the returned value from the lookup activity. If you do not want the lookup icon and link to appear at all, uncheck **Lookup**, clear all checkbox options, and clear the **Label** field for this subdocument. The remaining fields specified on the subdocument personalization form appear as fields on the current form. If **Readonly** is checked for the subdocument, then the fields are displayed as read-only.

#### **Configuring collections**



After you select a collection in the Current Configuration list, click the wrench icon to configure the collection:



Collections that can be personalized contain the same icons as higher-level interfaces, including the wrench icon. However, collections offer slightly different options.

Description
Shows all the document columns that can be added to the current form. Peregrine OAA generates the list of available columns by dynamically reading the schema that the form uses. Any items listed between dashes are form components you can use to organize and arrange how document columns are displayed in the form.
Shows the document columns and displays components that are on the current form.

Field	Description
Explorer Options  Lookup Create Popup Remove Max. Row Count	Defines how Peregrine OAA displays results. Users see the Explorer Options section only if they have administrative Personalization rights.
Save	Saves and applies your Personalization changes to the current form.

**Note:** A collection is handled as a many-to-many relationship if the first column of the collection is from another document. When personalizing a collection where you do not want a many-to-many relationship, make sure that its first column is not a subdocument reference; the first column in the collection must be a local attribute of the collected schema.

#### **Supporting personalization**

To support Personalization, you must have these components:

- An AssetCenter or ServiceCenter back-end database. Personalization requires you to store users' login rights and Personalization changes in one of these two databases.
- Adapter aliases defined for the following tabs on the Get-Answers Administration settings page:
  - Portal
  - PortalDB
  - Web Application

#### **Activating Personalization**

Personalization is intended to be an administration tool. Administrators can add and remove the fields they want to display in the interface and then turn off personalization to prevent end-users from adding or removing fields.

If end-users have personalization access, there is no way to prevent them from changing fields available through personalization.

You can grant users access to personalization features in one of two ways:

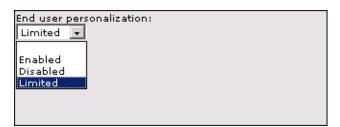
- Grant all users personalization rights by setting the end-user personalization administrative setting.
- Grant individual users personalization rights by adding a capability word to their user profile.

#### Granting global personalization rights

You can globally define end-user access to personalization by selecting one of three options from the End User Personalization options.

#### To grant all users personalization rights:

- 1 Login to the Get-Answers administration page.
- **2** Click **Administration** > **Settings**.
- 3 Click the Common tab and scroll down to the End user personalization parameter.
- 4 Select the level of personalization you want to grant all users from the End user personalization drop-down list.



■ Enabled. This setting grants all users the getit.personalization.default capability word, which enables end-users to add or remove any field listed in the schema used by a DocExplorer. However, only end-users who also have the getit.personalization.admin (or equivalent) capability word will be able to use the advanced explorer options.

- Disabled. This setting globally turns off all personalization except to users who the administrator has granted individual personalization rights by adding a capability word to their user profile in the Get-Answers back-end database. The personalization wrench icon will be hidden from the Get-Answers interface, and any end-users who have individual personalization rights will only see the fields that an administrator has configured to be visible.
- Limited. This setting grants all users the getit.personalization.limited capability word, which enables end-users to add or remove only the fields that appear on a form by default or that administrator has made visible. Unless end-users have an individual capability word with greater rights, end-users can only add or remove the fields that an administrator has configured to be visible. This setting also prevents end-users from changing read-only fields to editable fields.

**Tip:** Peregrine Systems recommends that personalization be restricted to administrators in the production environment. That is, set the global Personalization setting to **Disabled** and then add the capability word **getit.personalization.admin** to the administrative user.

#### **Granting individual personalization rights**

You can grant individual users personalization rights by adding a capability word to the user profile stored in the Get-Answersback-end database. The following personalization capabilities words are available:

- getit.personalization.limited—Users can only personalize features that have been exposed by a user with greater personalization rights.
- getit.personalization.default—Users can change the layout and add or remove fields from the Get-Answers interface.
- getit.personalization.admin—Users can do everything that the default capabillity word allows plus users can set personalization options and save personalization changes as the default layout. The admin capability word also grants the following rights:
  - Document Creation. Users can specify the capability words required to create new records in the back-end database.
  - Document Update. Users can specify the capability words required to submit records to the back-end database.
  - Document Deletion. Users can specify the capability words required to delete records from the back-end database.

Save. Any personalization changes that the admin user saves determine what other users see. If the admin user adds a field, then the field becomes visible in the available fields list for other users. If the admin user removes a field, then the field is hidden from other users.

By default, users have no personalization capability word. To add a capability word, you must add it to the Get-Answers back-end database or set global personalization rights.

#### **Personalization tasks**

Using DocExplorer, you can personalize any Web application interface that has a wrench icon in the top right of the Peregrine OAA frame. DocExplorers allow end users a means to create and customize searches of data. From the end-user perspective, a DocExplorer is a special activity that allows someone to personalize part of the interface. The user's profile determines the Personalization rights granted.

#### Adding fields to a form

With personalization rights, you can add fields to a form from the Available Fields list. You can then change the layout, if needed. Your personalization rights determine the lists of fields that you see.

You can add a field that is not currently available in the DocExplorer's schema by creating a schema extension. See the *Document Schema Definitions* chapter in this guide for more information on adding a new field.

**Note:** Data is not displayed in newly added DocExplorer fields. Users must close and resubmit the search or detail query before data will appear in a new DocExplorer field.

#### To add fields to a form:

- 1 Do one of the following:
  - From the upper right corner of the active form, click the **Personalize** icon.
  - From the lookup page, click **Personalize this page**.
- 2 Select a field from the Available Fields list.
- 3 Click the Plus (+) icon.

  The field appears in the Current Configuration list.
- 4 Optionally, click the Insert icon to insert a component.

5 Click Save.

**Tip:** The browser warns that data must be present when adding fields in DocExplorer. Click Retry to resend the data to the browser. This is expected behavior of DocExplorer.

#### To arrange the field order:

- 1 Select a field from the Current Configuration list.
- 2 Click the up arrow or down arrow to change the field's position in the Current Configuration list.
- 3 Click Save.

#### To change the field layout:

- 1 From the Available Fields list, select Left/Right Split.
- 2 Click the Plus (+) icon.

#### To add a new section:

- 1 From the Available Fields list, select Section Title.
- 2 Click the Plus (+) icon.

**Note:** See *Changing the label of a field* on page 125 for information on editing the Section Title field.

3 From the Current Configuration column, arrange the order of the section with the Up, Down, and Remove icons.

**Note:** These icons either move or delete a field. Deleting a field removes the item from the form.

4 Click Save to keep your changes and return to the form.

#### **Configuring field attributes**

Each field in a personalization form has its own set of attributes that you can modify.

#### To configure field attributes:

- 1 Double click a field from the Current Configuration list to open an edit window.
- **2** Enter the new field attributes.

**Note:** Each field has its own set of field attributes. The following table only lists the more common field attributes:

Field	Description		
Colspan	The number of data cells in a column.		
Label	The name to be used as the field label. This name appears next to the field in the Get-Answers interface.		
Readonly	Yes prevents users from updating information displayed in the field.		
Required	Yes requires the field to have a value before the form can be submitted.		
Rowspan	The number of data cells in a row.		
Size	The number measurement of a component in a cell.		

3 Click Save to save your changes and return to the previous pages. Cancel returns you to the previous page without saving your changes.

#### Changing the label of a field

To change the existing label of a field, you must have personalization rights.

#### To change the label of a field:

- 1 From the Current Configuration column, select the label you want to change.
- **2** Click the **Personalize** (wrench) icon.
  - The Personalization window opens.
- 3 Type the new name in the Label text box, then click Save to save your changes and return to the previous pages.
  - Cancel returns you to the previous page without saving your changes.

#### Changing a field to read-only

You can make a field read-only if you do not want users updating information in the displayed field.

#### To change a field to read-only:

- 1 From the Current Configuration column, select the field you want to be read-only.
- **2** Click the **Personalize** (wrench) icon.
  - The Personalization window opens.
- 3 Toggle the Read Only field to Yes.
- 4 Click Save to save your changes and return to the previous pages.

  Cancel returns you to the previous page without saving your changes.

#### Making a field required

You can require users to enter a value in a field before they can submit a form.

#### To make a field required:

- 1 From the Current Configuration column, select the field you want to be required.
- 2 Click the Personalize (wrench) icon. The Personalization window opens.
- 3 Toggle the Required field to Yes.
- 4 Click Save to save your changes and return to the previous pages.
  Cancel returns you to the previous page without saving your changes.

#### Changing the size and span of a field

You can change the dimensions of the field by assigning values to the row span and size.

#### To change the size and span of a field:

- 1 From the Current Configuration column, select the field you want to change.
- 2 Click the Personalize (wrench) icon.
  - The Personalization window opens.
- **3** Type the values for the **Row Span** and **Size**.
- 4 Click Save to save your changes and return to the previous pages.
  Cancel returns you to the previous page without saving your changes.

#### Removing fields from a form

#### To remove fields from a form:

- 1 Select a field from the Current Configuration list.
- **2** Click the **X** button to remove the field.
- 3 Click Save.

# Moving Personalizations from a development to a production environment

You can easily export personalizations that you created in a development environment and import them to a production environment.

Moving the files is a two-step process:

- **Step 1** Export the personalization files from your development environment.
- **Step 2** Import the personalization files to your production environment.

**Note:** Only personalizations that were made by users who have **getit.personalization.admin** capability can be exported using the export and import processes.

#### To export personalization files:

- 1 Log in to the development application server Administration page.
- **2** Click Administration > Import/Export.
- **3** Type the path to an existing folder on the server, including a file name, to make the file available to the production server.
- 4 Click Export.
- 5 Manually copy the file from your development server to your production application server.

#### To import personalization files:

- 1 Login to the production application server Administration page.
- 2 Click Administration > Import/Export.

- 3 Change the path and file name to the path and file name of the file you want to import.
- 4 Click Import.

# 6 Schemas

This document describes document schema definitions and explains how they map data between Get-Answers and the back-end database. In addition, this document discusses how to use schema extensions to add new logical and physical mappings to the KmDocument schema.

This document covers the following topics:

- Understanding Document Schema Definitions on page 130
- *How to use schemas* on page 131
- *Schema extensions* on page 132
- Editing the schema extension files on page 135
- Schema Elements and Attributes on page 140

#### **Understanding Document Schema Definitions**

A document schema definition (also called a schema) is an XML file that instructs the Archway Document Manager how to query back-end databases and generate XML documents containing the query response. Schemas are mapping tools that determine which XML tags used in dynamically created documents map to the table and field names in a given back-end database. These generated XML documents provide the data that Get-Answers displays and processes.

All schemas consist of two types of definitions:

- Base definitions—The schema entries that provide a logical mapping between the XML tags generated in a document query to the Get-Answers interface are collectively referred to as the schema base definitions. The Archway Document Manager uses the base definitions to generate XML tags based on the elements listed in the schema. The Archway Document Manager converts the name value listed in an <attribute> element into a XML tag of the same name.
- Derived definitions—The schema entries that provide a physical mapping between the XML tags generated in a document query to the table and field names in the back-end database are collectively referred to as the schema derived definitions. The Archway Document Manager queries the tables and field names listed in the schema and creates an XML document with the results of the query. The Archway Document Manager converts the table and field values listed in the <document> and <attribute> elements into a SOL query.

**Note:** The document schema definitions used by Peregrine Studio are not the same as the schemas being proposed and developed by the W3C.

The base and derived definitions each have their own list of legal elements and attributes. For more information on schema elements and attributes and how to use them, refer to *Schema Elements and Attributes* on page 140.

#### How to use schemas

In most cases, you access a schema through personalization where the list of available fields for personalization is determined by the schema. For more information about how to use personalization, refer to the *Personalization* chapter of this guide. If you want to change the fields that are available through personalization, you can create a schema extension.

A schema extension is a separate file listing only the changes you make to an existing schema's logical or physical mappings. For example, you could create a schema extension to provide updated physical mappings when you upgrade your back-end database. Creating schema extensions is the preferred method of tailoring schemas as your changes are stored in separate files that can be easily carried over during an upgrade.

#### Schema extensions

You can create schema extensions to add new *logical* and *physical* mappings to your existing schemas. Schema extensions allow you to save any additional mappings in separate files that preserve the original schema files shipped by Peregrine Systems. This separate file organization ensures that any upgrades will not overwrite your tailoring changes.

#### Sample schema

The following is a sample schemas that you can use as a template for your schema extension logical and physical mappings for the rKmDocument schema.

The file

C:\ProgramFiles\Peregrine\Common\Tomcat4\webapps\
oaa\WEB-INF\apps\oaagen\schema\extensions\rKmDocument.xml
lists the schema extension mappings.

#### When to use schema extensions

Schema extensions generally provide the most benefit when you use them to extend existing schemas. Extending a schema allows you to do the following tailoring tasks without the need to rebuild a project in Peregrine Studio:

- Add new fields to the Available Fields list.
- Hide existing fields from the Available Fields list.
- Change the label that a field displays in the Available Fields list.
- Change the list of forms where a field displays.
- Change the physical mapping of a field.
- Change the type of data a field stores.

#### **Extending schema extensions in Get-Answers**

You can create schema extensions using any Text editor to extend the KmDocument schema in Get-Answers. In a typical installation, it is located at:

C:\Program Files\Peregrine\Common\Tomcat4\webapps\oaa\WEB-INF\ apps\oaagen\schema\extensions

The Get-Answers Importer creates your schema extension files for you. If you have legacy documents to import, see *Chapter 11*, *Importing Legacy Data*, which explains how to use the Get-Answers Import Documents feature. This is the feature that creates the KmDocument schema extension for you.

The KmDocument schema extension is located in the following subfolder on a typical installation:

C:\Program Files\Peregrine\Common\Tomcat4\webapps\oaa\WEB-INF\ apps\oaagen\schema\extensions

Schema extension logical and physical mappings. This file contains the schema base and derived definitions. You or the Document Importer create this file in a subfolder of schema called extensions, and it has the same name rKmDocument.xml:

schema\extensions\rKmDocument.xml

To create the schema extension target folders and files yourself:

Copy the sample schema XML source file into the following directory:

#### 

#### **Editing the schema extension files**

The edits that you need to do to the schema extension files depend upon what features you are trying to include. The following sections outline what edits you need to perform for each feature.

- *Adding a new field to the Available Fields list* on page 135.
- Hiding an existing field from the Available Fields list on page 136.
- Changing the label a field displays in the Available Fields list on page 137.
- *Changing the list of forms where a field is available or visible* on page 137.
- *Changing the physical mapping of a field* on page 138.
- *Schema Elements and Attributes* on page 140.

#### Adding a new field to the Available Fields list

You can add a field to any form that uses personalization. New fields display as options in the personalization Available Fields list.

#### To add a new field to Available Fields list:

- Open the schema extension file in the extension folder.
   This file is for your schema extension logical and physical mappings.
- 2 In the upper <documents> section, add a logical mapping <attribute> element for each field you want to add to the list of Available Fields.

You must add each <attribute> element between the <document> tags:

- **a** Add the required name and type attributes to each <attribute> element.
- **b** Add any optional attributes you want to use for each <attribute> element.
- c Add usertype="jsp:rtf\_field.jsp" if the field is a rich text field (RTF) field. The Solution field above is an example of this.

Refer to *<attribute>* on page 144 for additional information on the *<*attribute> element.

**3** For each logical attribute in the upper <documents> section, add an <attribute> element between the <document> tags for the physical attribute in the lower <documents> section.

- a Add the required name, member, and field attributes for each entry you defined in the logical mapping. In the example, field="\_null" is required to tell the rome adapter that there is no separate physical mapping for this field in the database, which means that this field does not have its own column in the KmDocument table. Instead, it is packaged into the DocBody blob column in the KmDocument table along with other fields marked with \_null. The member field is used by the rome adapter and must have the same value as the name field.
- **b** Add any optional attributes you want to use for the physical mapping. See *<attribute>* on page 144 for more information on optional attributes of the *<*attribute> element.
- 4 Save the schema extension file.

#### Hiding an existing field from the Available Fields list

You can hide a field from the list of Available Fields in personalized forms. Hidden fields will not be available to any user regardless of user rights.

#### To hide an existing field from the Available Fields list:

- 1 Open the schema extension file in the extension folder.
- 2 Locate the logical mapping for the field you want to remove in the upper <documents> section.
  - Use the label attribute to identify the proper field. For example, if the Available Field you want to remove is called Contact, search the <attribute> element that has the value label="Contact".
- 3 Add the following four attributes to the <attribute> element you want to remove from the Available Fields list:
  - search="false"
  - list="false"

These settings tell DocExplorer to hide the field on the search, list, detail, and create forms.

4 Save the schema extension file.

#### Changing the label a field displays in the Available Fields list

You can change the label that appears in the Available Fields list of personalized forms. Typically, you only need to add labels to new fields that you have added to a schema.

#### To change the label a field displays in the Available Fields list:

- 1 Open the schema extension file in the extension folder.
- **2** Locate the logical mapping for the field you want to change in the upper <documents> section.

Use the label attribute to identify the proper field. For example, if the Available Field you want to change is called **Contact**, search the <attribute> element that has the value label="Contact".

3 Change the label attribute to the new desired value.

4 Save the schema extension file.

#### Changing the list of forms where a field is available or visible

You can determine the list of forms in which a field is available or visible. By default, a new field is available in all forms, but not visible. You can use personalization to make an available field visible on a form.

#### To change the list of forms where a field is available or visible:

- 1 Open the schema extension file in the extension folder.
- 2 Locate the logical mapping in the upper <documents> section for the fields whose availability you want to change.
  - Use the label attribute to identify the proper field. For example, if the Available Field you want to remove is called **Contact**, search the <attribute> element that has the value label="Contact".
- 3 Add one of the following values to make a field available or visible.

Location in Get-Answers menu	To make this form	Available	Visible	Neither available or visible
Reports	search	■ search= ■ search =true	search=true	search=false
Reports	list	■ list= ■ list=true	list=true	list=false
Workflows and Reports	detail	<ul><li>detail=</li><li>detail=true</li></ul>	detail=true	detail=false
Contribute New Document	create	■ create= ■ create=true	create=true	create=false

For example, the following settings make the contact field both available and visible in all forms:

**4** Save the schema extension file.

#### Changing the physical mapping of a field

You can change the physical mapping that a field uses to point to another back-end database, table, or physical field.

#### To change the physical mapping of a field:

- 1 Open the rKmDocument.xml schema extension file in the extension folder.
- 2 In the lower <documents> section, change the physical mapping <attribute> element to match the new physical mapping you want.

The physical mapping <attribute> elements are between the <document> tags:

Change physical mappings here

- a Change the field attribute to the new physical mapping.
- **b** Add any optional attributes you want to use for the physical mapping. Refer to *<attribute>* on page 144 for more information on optional attributes of the *<*attribute> element.
- **3** Save the schema extension file.

#### **Schema Elements and Attributes**

All schemas use a standard set of XML elements and attributes that the Archway Document Manager recognizes. The following sections describe the XML elements and associated attributes that you can use to create valid schemas.

#### <?xml>

The <?xml> element is the standard XML namespace identifier. This element should always include the version attribute. All schemas require that this be the first element listed.

#### <schema>

The <schema> element is a required element of all schemas. The <schema> element functions as a container for the logical and physical mappings. The <schema> element does not have any attributes.

#### <documents>

Two sets of <documents> elements are required for each schema. One set of <documents> elements is the container for the logical mappings and the other set of <documents> elements is the container for the physical mappings.

#### Use in logical mapping

All schemas require one <documents> element where the name attribute has the value name="base". When this element has this name value, it becomes the container for the logical mappings.

# Required attributes

• name. This attribute identifies the <documents> element container used by the logical mappings. This attribute must have the value name="base".

#### **Optional** attributes

None. There are no optional attributes for the logical mapping portion of the schema.

```
<?xml version="1.0"?>
                     <schema>
Logical mappings always
use name="rome"-
                     -<documents name="rome">
                     </documents>
```

#### Use in physical mapping

All schemas require at least one <documents> element where the name attribute has the value of an adapter name such as name= "rome". You can add one <documents> element for each adapter you want to provide physical mappings for. You can also support multiple versions of the same adapter if you use the version attribute.

#### Required attributes

name. This attribute determines what adapter the schema uses to make connections to the back-end database. The value of this attribute must be an adapter name such as name="rome".

#### <document>

You must add at least two sets of <document> elements to create a valid schema – one set for the logical mappings and another set for the physical mappings. You can add additional <document> elements in the physical mapping section if you want to support multiple adapters or multiple versions of the same back-end database.

#### Use in logical mapping

The logical mapping section uses the <document> elements as a container for the XML document that the Archway Document Manager produces. All XML elements produced by this schema will be child elements of the <document> element.

#### Required attributes

name. This attribute determines what XML element the Archway Document Manager generates as the top-level element in any generated document using this schema. The value of this attribute must match the file name of the schema (without the .xml extension).

### Optional attributes

- ACLcreate. This attribute determines the default access control list for DocExplorer forms that use this schema. The value of this attribute must be a capability word. Users who meet or exceed the capability word listed in this attribute will see a New button in DocExplorer forms that use this schema.
- ACLdelete. This attribute determines the default access control list for DocExplorer forms that use this schema. The value of this attribute must be a capability word. Users who meet or exceed the capability word listed in this attribute will see a **Delete** button in DocExplorer forms that use this schema.
- ACLupdate. This attribute determines the default access control list for DocExplorer forms that use this schema. The value of this attribute must be a capability word. Users who meet or exceed the capability word listed in this attribute will be able to edit fields in DocExplorer detail forms that use this schema.
- create. This attribute determines if a subdocument using this element is visible in DocExplorer *create* forms. The value of this attribute must be either true or false. Set the value to create="true" if you want this subdocument to be available on DocExplorer create forms. Set the value to create="false" if you want to prevent this subdocument from being available on DocExplorer create forms.
- detail. This attribute determines if a subdocument using this element is visible in DocExplorer *detail* forms. The value of this attribute must be either true or false. Set the value to detail="true" if you want this subdocument to be available on DocExplorer detail forms. Set the value to detail="false" if you want to prevent this subdocument from being available on DocExplorer detail forms.
- docname. This attribute defines the external schema that you want the Archway Document Manager to use to create a subdocument. The value of this attribute must match the file name of the schema (without the .xml extension) that you want to use for the subdocument. You only need this attribute if you want to create a subdocument using another schema.
- label. This attribute determines what name the schema has in DocExplorer forms that use this schema. The value of this attribute can be any text string. Typically, you will want to set this value to a user-friendly name describing the content of the schema.

- list. This attribute determines if a subdocument using this element is visible in DocExplorer list forms. The value of this attribute must be either true or false. Set the value to list="true" if you want this subdocument to be available on DocExplorer list forms. Set the value to search="false" if you want to prevent this subdocument from being available on DocExplorer list forms.
- loadscript. This attribute determines what ECMAScript function runs when this schema is used in a DocExplorer form. The value of this attribute must be the Peregrine Studio name of the ECMAScript function you want to run. You can use this script to load additional data for use by DocExplorer forms. This script uses the same XML message input as the form onload script.
- preexplorer. This attribute determines what ECMAScript runs when this schema is used in a DocExplorer form. The value of this attribute must be the Peregrine Studio name of the ECMAScript you want to run. You can use this script to make formatting changes to the XML message rendered by DocExplorer forms.
- search. This attribute determines if a subdocument using this element is visible in DocExplorer search forms. The value of this attribute must be either true or false. Set the value to search="true" if you want this subdocument to be available on DocExplorer search forms. Set the value to search="false" if you want to prevent this subdocument from being available on DocExplorer search forms.
- subtypeprop. This attribute determines whether this element inherits the attribute properties of the parent <collection> element. The value of this attribute must be inherit if you use the attribute at all. If you want this element to inherit the attribute properties set the value to subtypeprop="inherit". If you want to specify the the attribute properties for this element, do not include a subtypeprop attribute.

#### Use in physical mapping

The physical mapping section uses the <document> elements to define the SQL name of the back-end database table.

#### Required attributes

name. This attribute determines what XML element the Archway Document Manager matches to a back-end database table. The value of this attribute must match the file name of the schema (without the .xml extension). In Get-Answers, the name is rome.

■ table. This attribute identifies the table in the back-end database that the schema uses. The value of this attribute must be the SQL name of the table you want to use for source data. Each <document> element can only have one table attribute. To use data from other tables, you can create subdocuments within your schema. In Get-Answers, the table is rKmDocument.

## Optional attributes

- preprocess. This attribute determines what ECMAScript function runs before the Archway Document Manager connects to the back-end database. The value of this attribute must be the Peregrine Studio name of the ECMAScript function you want to run. You can use this script to format the request sent to the back-end database. For example, you can add additional SQL commands or validate that all required fields are listed in the request.
- postprocess. This attribute determines what ECMAScript runs after the Archway Document Manager receives a response from the back-end database. The value of this attribute must be the Peregrine Studio name of the ECMAScript you want to run. You can use this script to format the response sent from the back-end database. For example, you can sort the data by a particular criteria or return an error message if no records are found.

#### <attribute>

You must add at least two sets of <attribute> elements to create a valid schema – one set for the logical mappings and another set for the physical mappings.

#### Use in logical mapping

The logical mapping sections use the <attribute> elements to create an XML element in any document message built from this schema.

# Required Attributes

- name. This attributes determines the XML tag that the Archway Document Manager generates when it uses the schema. The value of this attribute can be any string value. For example, if you set the value to name="contact" then the Archway Document Manager creates a <contact> XML tag. You must define at least one <a href="attribute">attribute</a>> element where the name attribute has the value name="Id". This <a href="attribute">attribute</a>> element is required to uniquely identify each record returned by a schema query.
- type. This attribute determines what data format the elements uses as well as how Get-Answersrenders the data in the user interface. The value of this attribute must be one of the following strings:

- attachment—This element is a path and file name to an attachment. Get-Answers renders this element as a collection of attachment controls.
- boolean—This element is a true or false string. Get-Answers renders this element as a check box.
- date—This element is a date listing. Get-Answers renders this element as a date edit control that includes a popup calendar.
- datetime—This element is a combined date and time listing. Get-Answers renders this element as a time edit control.
- id—This element is a number that uniquely describes a back-end database record. Get-Answers renders this element as a single-line edit field.
- image—This element is an image. Get-Answers renders this element as an imagefield.
- link—This element is a subdocument described elsewhere in the schema. Get-Answers renders this element a lookup field.
- memo—This element is a text string. Get-Answers renders this element a multi-line edit box.
- money—This element is a currency amount. Get-Answers renders this element a money field that includes a currency selection tool.
- number—This element is an integer. Get-Answers renders this element an editfield with spinner buttons.
- preload—This element is an executable script. Get-Answers runs the script listed in this element.
- string—This element is text. Get-Answers renders this element an editfield.
- time—This element is a time listing. Get-Answers renders this element as a time edit control.
- url—This element is a Web site address. Get-Answers renders this element as an HREF link icon.

**Note:** The Archway Document Manager does not validate that the contents of an element matches the type attributed listed for it.

#### **Optional** attributes

 access. This attribute determines if the element is read-only or editable in DocExplorer forms. The value of this attribute must be either r or null. Set the value to access="r" if you want to make this element read-only. Clear the value or remove the attribute if you want to make the element editable.

- ACLcreate. This attribute determines the default access control list for DocExplorer forms that use this element. The value of this attribute must be a capability word. Users who meet or exceed the capability word listed in this attribute will see this element in DocExplorer *create* forms that use this schema.
- ACLdetail. This attribute determines the default access control list for DocExplorer forms that use this element. The value of this attribute must be a capability word. Users who meet or exceed the capability word listed in this attribute will see this element in DocExplorer *detail* forms that use this schema.
- ACLIst. This attribute determines the default access control list for DocExplorer forms that use this element. The value of this attribute must be a capability word. Users who meet or exceed the capability word listed in this attribute will see this element in DocExplorer *list* forms that use this schema.
- ACLsearch. This attribute determines the default access control list for DocExplorer forms that use this element. The value of this attribute must be a capability word. Users who meet or exceed the capability word listed in this attribute will see this element in DocExplorer *search* forms that use this schema.
- create. This attribute determines if the element is visible in DocExplorer *create* forms. The value of this attribute must be either true or false. Set the value to create="true" if you want this field to be available on DocExplorer create forms. Set the value to create="false" if you want to prevent this field from being available on DocExplorer create forms.
- detail. This attribute determines if the element is visible in DocExplorer detail forms. The value of this attribute must be either true or false. Set the value to detail="true" if you want this field to be available on DocExplorer detail forms. Set the value to detail="false" if you want to prevent this field from being available on DocExplorer detail forms.
- label. This attribute determines what name the element has in DocExplorer Available Field list. The value of this attribute can be any text string. Typically, you will want to set this value to a user-friendly name describing the content of the field.
- list. This attribute determines if the element is visible in DocExplorer list forms. The value of this attribute must be either true or false. Set the value to list="true" if you want this field to be available on DocExplorer list forms. Set the value to search="false" if you want to prevent this field from being available on DocExplorer list forms.

- required. This attribute determines if this element requires a value in order to insert or update a record in the back-end database. The value of this attribute must be either true or false. Set the value to required="true" if you want to make the element a required input field when it is added to DocExplorer forms.
- search. This attribute determines if the element is visible in DocExplorer *search* forms. The value of this attribute must be either true or false. Set the value to search="true" if you want this field to be available on DocExplorer search forms. Set the value to search="false" if you want to prevent this field from being available on DocExplorer search forms.

#### Use in physical mapping

The physical mapping sections use the <attribute> elements to define the fields in the back-end database that map to each logical mapping.

#### Required Attributes

- name. This attributes determines the XML tag in which the Archway Document Manager places query results. The value of this attribute must match an element defined in the logical mapping section.
- field. This attribute identifies the field in the back-end database that you want the schema to use for document queries. The value of this attribute must be the SQL name of the field you want to use for the data source.
- member. The value of this attribute must be the SQL name of the field you want to use for the data source. field is used by the rome adapter and must have the same value as the name field.

#### **Documents**

The Archway Document Manager uses schemas to create documents, which are XML messages created from the following components:

- Schema logical definitions. The schema logical definitions determine what XML elements make up the generated document.
- The return values of database queries. The Archway Document Manager uses the schema physical mappings to create database queries. The return values of these queries determine the content of the elements and attributes of the generated document.
- ECMAScript formatting. ECMAScript functions can modify a document before and after any queries have been made to the back-end database.

The final output of these three processes is an XML document that the Archway Document Manager renders as HTML in the interface.

You can see the raw XML documents by enabling the **Show form information** option from the Administration settings. The form information window displays the following document information:

- Script Input. This tab displays the document submitted to the current form from the output of a previous form. For example, a list form displays the output of a prior search form. This document is passed to the form onload script as an input parameter.
- Script Output. This tab displays the document generated by the output of the current form's onload script. Typically, each onload script invokes a schema that queries the back-end database for relevant information. For example, a form will invoke a database query through theschema.
- PreXSL. This tab displays the document after the Archway servlet has processed the document and prepared it to be rendered by the client-side browser.

### **Preserving custom SelectFields**

In order to avoid customized selectfields (ga\_selectfield1.jsp-ga\_selectfield5.jsp) from being overwritten during future upgrades, you can use a schema extension to override the SelectField1...SelectField5 attributes in the rKmDocument schema. The usertype attribute indicates which jsp file to use for displaying the field. Make a copy of the out-of-box.jsp indicated for this field, then rename the file. You can then perform customization on the renamed.jsp file. In the schema extension, you can override the SelectField attribute and change the usertype attribute to point to the new .jsp file.

Make a copy of ga\_selectfied1.jsp located in <TOMCAT\_HOME>\webapps\oaa and rename it to MYSELECTFIELD1.jsp. Create a schema extension for rKmDocument to override the out-of-box attribute for SelectField1:

```
<attributelabel=
    "$$IDS(Entities,Entities_KmDocument_Members_SelectField1_Label)"
    name="SelectField1" type="string"
    usertype="jsp:ga_selectfield1.jsp" localize="false" required="false"
    tokensleft="false"/>

and change it to:
    <attributelabel=
```

 $"\$IDS (Entities, Entities\_KmDocument\_Members\_SelectField1\_Label)"$ name="SelectField1" type="string" usertype="jsp:MYSELECTFIELD1.jsp" localize="false" required="false" tokensleft="false"/>

This ensures that future upgrades and patches do not overwrite the customizations for these fields.

# **Get-Answers Administration**

This chapter includes instructions for administering your Get-Answers system.

Topics in this chapter include:

- Accessing the Peregrine Portal Admin module on page 152
- Using the Control Panel on page 154
- Viewing the Deployed Versions on page 155
- Using the Settings page on page 156
- *Logging* on page 158
- Verifying Script Status on page 164
- Displaying Message Queues on page 164
- Showing Queue Status on page 165
- Importing and exporting personalizations on page 166
- Viewing adapter transactions on page 166
- Using the IBM Websphere Portal on page 167
- *Displaying form information* on page 167
- *User self-registration* on page 170
- Changing passwords on page 171
- Logging and monitoring user sessions on page 171

## **Accessing the Peregrine Portal Admin module**

The Peregrine Portal administrator login page enables access to the Peregrine Portal Admin module. You use the Admin module to define the settings for your Peregrine system.

**Note:** After installing and building Get-Answers, you must log in as a ServiceCenter user with **getit.admin** rights to access the Admin module and administer the Get-Answers integration with ServiceCenter . For a list of access capability words and Adapter configuration instructions, see the section on Get-Answers security in this guide.

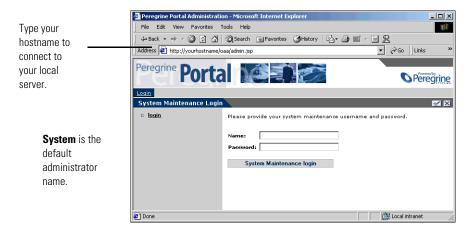
A default administrator, System, gives you access to the Admin module without being connected to a back-end system. After you configure your user name on the Common tab, you can also access the Admin module from the Navigation menu.

Important: When you change parameters using the Admin module, a local.xml file is created in the \<appsilon appsilons \\ (where appsilons view) is the path to your application server) to store these parameters. If you reinstall Get-Answers, make a copy of this file and store it outside your Get-Answers installation. Failure to do this will result in your parameter values being lost during the new installation.

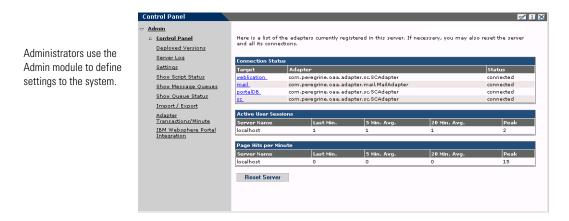
#### To access the Peregrine Portal administrator login page:

- 1 Verify that your application server (for example, Tomcat) is running.
- **2** In your Web browser Address field, type:
  - <hostname>/oaa/admin.jsp

3 Press Enter to open the Portal administrator login page.



- 4 In the Name field, type System. No password is required on initial login.
- 5 Click System Maintenance login to open the Control Panel page.



The activities available in the Admin module include:

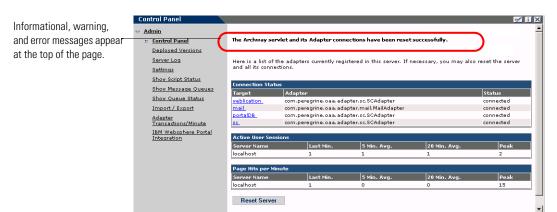
Select this option	To do the following
Control Panel	View the status of connections to the back-end systems.
Deployed Versions	View the list of deployed applications with version numbers on this server.
Server Log	View activity on the Get-Answers server.
Settings	View and change settings for the Peregrine Portal.
Show Script Status	View and verify which scripts are running. You can also start and stop scripts from this window.
Show Message Queues	View a list of all message queues.
Show Queue Status	View the current status of the queues: operational and unlocked, or suspended.
Import / Export	Move Personalizations from a development to a production environment.
Adapter Transactions/Minute	View the transactions per minute for the back-end adapter.
IBM Websphere Portal Integration	View the installed OAA portal components in the IBM WPS environment

# **Using the Control Panel**

Use the Control Panel page to check the status of the connections to the databases you are accessing with Get-Answers and your Web applications. You can also reset the connection between the Archway servlet and the adapters to the back-end systems.

To reset the connection between the Archway servlet and back-end system:

▶ Click Reset Server.



A message at the top of the page indicates that the connections are reset.

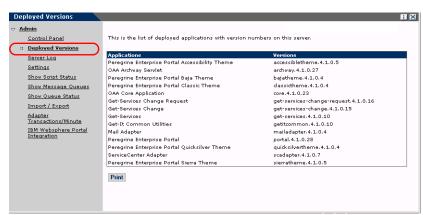
# **Viewing the Deployed Versions**

The Deployed Versions screen lists all of the packages that deploy during the installation, including the version number of each package.

#### To view the Deployed Versions list:

1 From the Activity menu, select Deployed Versions. A list of the installed packages opens.

Current applications and their versions are available for viewing with the Deployed Versions option.



2 Click Print for a printout of this list.

## **Using the Settings page**

On the Activity menu, click **Settings** to open the current parameter settings. The Settings page is divided into tabs. The tabs that you see depend on the Web applications that you installed and the adapters that you use. The Common tab is available for all installations.

Settings for the Portal, PortalDB, and Web Application tabs are set during the installation (refer to the *Get-Answers Installation Guide*). You can access the Settings page at any time to change the installation settings. Set the E-mail tab only when users have access to self-registration (see *User self-registration* on page 170).

#### To view Settings:

► From the Activity menu, click **Settings**.

Each parameter on the tab has a description that guides you through the settings.

The tabs you see on the Settings page depend on the Web applications you installed.



### Setting parameters using the Admin module

When you make changes using the Admin Settings page, a local.xml file is created in the C:\<appsrur>\WEB-INF directory. All changes to property settings are stored in this file. Restart Tomcat after making changes that are stored in local.xml.

Important: If you change parameters on the Admin Settings page and then need to reinstall Get-Answers, it is important that you copy the local.xml file to a location other than your Get-Answers installation, or all of your settings will be lost when you redeploy Get-Answers. After the installation, move the copy back to the WEB-INF directory.

#### To define a parameter:

1 Locate the setting you want to change and type the new parameter.

**Note:** If you have previously changed a setting and want to return to the default setting, click the **Click for default** link displayed in the description area for the parameter you want to revert. This link appears only when a setting is different from the default.

**2** Scroll to the bottom of the page, and then click **Save**.

**Note:** You must click **Save** on each page before making changes to another setting.

The Control Panel opens.

3 Click Reset Server.

An information message at the top of the Control Panel indicates that the server has been reset.

#### **Choosing a Login Language**

When you log in to the Peregrine Portal, you can choose from the **Language** pull-down list the language that the Portal displays. The default language is English, but you can enable additional languages.

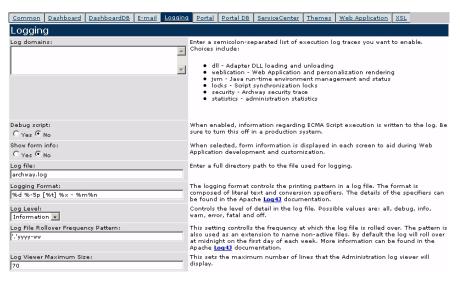
#### To enable additional login languages:

- 1 Click **Settings** in the Control Panel.
- 2 Scroll down to the Encoding, Locales, and Sessions section.

- 3 In the Locales field type a comma-delimited list of the languages you want to enable.
  - The first locale defines the default; in this case "en" for English, which already appears in the field. A locale is specified by the ISO-639 language code, which you can combine with the ISO-3166 Country code, separated with an underline ("\_"). For example, "fr" enables French; "en" and "en\_US" specify U.S. English, where dates are formatted Month/Day/Year; "en\_GB specifies British English, where dates are formatted Day/Month/Year. The value "en\_GB,fr,de,it" specifies that British English, French, German, and Italian are enabled.
- 4 Make sure that **Yes** is specified for **Enable Logout**. This is important because you need to log out of the Peregrine Portal and log back in for your changes to take effect.

## Logging

You can use the Logging tab in the Admin Settings page to customize the logging of events in a server log file, whose default name is archway.log.



You can specify the following log traces in the Log domains field:

- dll Adapter dll loading and unloading
- weblication Web application and personalization rendering

- jvm Java run-time environment management and status
- locks Script synchronization locks
- security Archway security trace
- statistics Administration statistics

### **Logging format**

You can specify in the Logging Format field the printing pattern of a log file. The logging format is composed of literal text and conversion specifiers. The details of the specifiers can be found in the following table, which can be found in its entirety, along with additional information, on the Apache.org web site at

http://logging.apache.org/log4j/docs/api/org/apache/log4j/PatternLayout.html.

# Logging format table

Conversion character	Effect
c	Used to output the category of the logging event. The category conversion specifier can be optionally followed by <i>precision specifier</i> , which is a decimal constant in brackets.
	If a precision specifier is given, then only the corresponding number of right-most components of the category name will be printed. By default the category name is printed in full.
	For example, for the category name "a.b.c" the pattern $%c\{2\}$ is output as "b.c".
С	Used to output the fully qualified class name of the caller issuing the logging request. This conversion specifier can be optionally followed by <i>precision specifier</i> , which is a decimal constant in brackets.
	If a precision specifier is given, then only the corresponding number of right most components of the class name will be printed. By default the class name is output in fully qualified form.
	For example, for the class name "org.apache.xyz.SomeClass", the pattern $%C\{1\}$ is output as "SomeClass".
	<b>Note:</b> Generating the caller class information is slow. Avoid it unless execution speed is not an issue.
d	Used to output the date of the logging event. The date conversion specifier may be followed by a <i>date format specifier</i> , which is enclosed in braces, such as
	%d{HH:mm:ss,SSS}
	or
	%d{dd MMM yyyy HH:mm:ss,SSS}  If no date format specifier is given then ISO8601 format is assumed.
F	Used to output the file name where the logging request was issued.
	<b>Note:</b> Generating caller location information is extremely slow. Avoid it unless execution speed is not an issue

Conversion character	Effect
l [lower-case letter]	Used to output location information of the caller that generated the logging event.
	The location information depends on the JVM implementation, but usually consists of the fully qualified name of the calling method followed by the caller's source, the file name, and the line number enclosed in parentheses.
	<b>Note:</b> Though location information can be very useful, its generation is <i>extremely</i> slow. Avoid it unless execution speed is not an issue.
L	Used to output the line number from where the logging request was issued.
	<b>Note:</b> Generating caller location information is extremely slow. Avoid it unless execution speed is not an issue.
m	Used to output the application supplied message associated with the logging event.
M	Used to output the method name where the logging request was issued.
	<b>Note:</b> Generating caller location information is extremely slow. Avoid it unless execution speed is not an issue.
n	Outputs the platform-dependent line separator character(s), which offer practically the same performance as using non-portable line separator strings such as "\n" or "\r\n". Thus, it is the preferred way of specifying a line separator.
p	Used to output the priority of the logging event.
r	Used to output the number of milliseconds elapsed between the time when the application started and the time of the logging event.
t	Used to output the name of the thread that generated the logging event.
x	Used to output the NDC (nested diagnostic context) associated with the thread that generated the logging event.

Conversion character	Effect
X	Used to output the MDC (mapped diagnostic context) associated with the thread that generated the logging event. The <b>X</b> conversion character <i>must</i> be followed by the key for the map placed between braces, as in: %X{clientNumber}
	where <i>clientNumber</i> is the key. The value in the MDC
	corresponding to the key will be output.
%	The sequence %% outputs a single percent sign.

The format of the log file is determined by the Apache PatternLayout class.

### Log file rollover

You can specify in the Log File Rollover Frequency Pattern field the frequency with which the log file is rolled over . The pattern that you enter is also used as an extension to name non-active files. By default the log file rolls over at midnight on the first day of each week, and logs a maximum one week's data. However, you can specify that the log files roll over at the following intervals: monthly, weekly, half-daily, daily, hourly, or every minute. Use the parameters in the following table, which can be found in its entirety, along with additional information, on the Apache.org web site at http://logging.apache.org/log4j/docs/api/org/apache/log4j/DailyRollingFileAppender.html

Rollover schedule
The beginning of each month
The first day of each week, depending on the locale
At midnight each day
At midnight and midday of each day
At the top of every hour
At the beginning of every minute

Log file rollover frequency is determined by the Apache DailyRollingFileAppender class.

### Viewing the Server Log

The Server Log provides a history of server events. The default file name is archway.log.

#### To view the Server Log:

1 From the Activity menu, select **Server Log**.

A form opens with a drop-down list for you to select the log you want to view.

You can view the log file from your Web browser or download it to your preferred location.



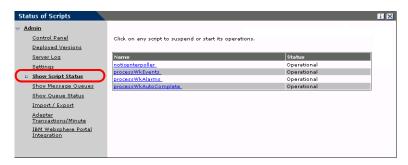
- 2 Click the drop-down and select the log file you want to view.
- 3 Set the number of lines to view.
- **4** Do one of the following:
  - Click View to see the log file from your Web browser.
  - Click Download to initiate the File Download wizard that downloads the archway.log file to a location of your choice.

## **Verifying Script Status**

The Script Status page lists the name and status of any script that is currently running.

#### To verify the script status:

1 From the Administration Activity menu, click Show Script Status to display the **Status of Scripts** page that shows the name of each script.



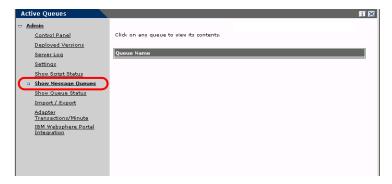
**2** Click on the script to suspend it.

# **Displaying Message Queues**

The Message Queues are displayed whenever a queue has data waiting to be transferred.

#### To display message queues:

1 From the Administration Activity menu, click Show Message Queues to display the Active Queues page.



2 Click the queue name in the list to view the contents of a queue.

### **Showing Queue Status**

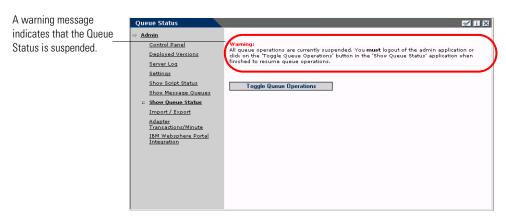
Use the Show Queue Status option to verify or change the status of the message queues.

#### To show queue status:

1 From the Activity menu, click **Show Queue Status** to open the Queue Status page.



2 Click Toggle Queue Operations to change the status to suspended.



3 Click Toggle Queue Operations to return to the operational status.

# Importing and exporting personalizations

You can move personalizations that you created in a development environment to a production environment. See the *Personalization* chapter in this guide for detailed instructions on importing and exporting the personalizations. Select the **Import/Export** option from the Admin activity menu to access the page.



## Viewing adapter transactions

You can track your adapter transactions by viewing the adapter Status page.

#### To view adapter transactions per minute:

► From the Activity menu, click **Adapter Transactions/Minute** to open the adapter **Status** page.

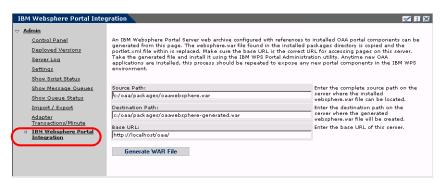


## Using the IBM Websphere Portal

You can generate an IBM Websphere Portal Server web archive (war) file configured with references to installed OAA portal components.

#### To generate a war file:

1 From the Activity menu, click IBM Websphere Portal Integration to open the Portal Integration page.



- **2** Enter the following information:
  - source path
  - destination path
  - base URL
- Click Generate WAR File.

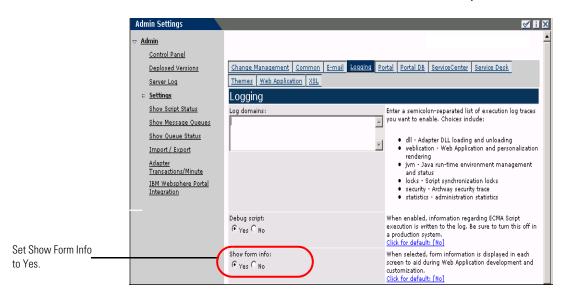
# Displaying form information

You can use the Admin module to configure Web application forms to display the location and file name of the current form.

#### To display form information:

1 From the Admin module, click **Settings**, then **Logging**.

2 Scroll to the Show form info field, and click Yes if necessary.

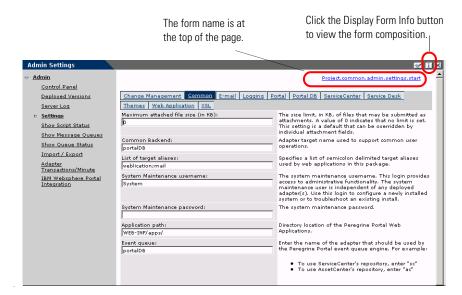


3 Click Save.

The Control Panel opens.

4 Click Reset Server.

The name of the form is at the top of each form.



#### **Displaying form details**

You can also display detailed information about the current form. Click the Display Form Info button at the top right of the form. A separate window opens.

View the contents in each tab for more information about the form.

```
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        Menu Source Sync/Update Window Help
      <?xml version="1.0" encoding="UTF-8"?>
          /*mi version="1.0" encoding="UIP-8"/>
_docExplorevItes/>
_docExplorevItes/>
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                    </_tabs>
<_locale>en</_locale>
</_docExplorerModel>
```

The form has the following tabs:

This tab	Contains
Script Input	the script that sends a request to the back-end system.
Script Output	the information returned by the script request to the back-end system.
User Session	details about the current user session, including browser type, back-end system version, and the access rights established for this user.
Log	a list of actions taken by the script to execute the form.
PreXSL	output from XSL before it gets rendered to the browser.
Browser Source	HTML source code for the current page.
BackChannel Source	HTML source code for frames where the data is stored.
Application Channel Source	HTML source code for the shared applications.

This tab	Contains
Tab Source	HTML source code for tabs.
Menu Source	HTML source code for menus.
Sync/Update Window	HTML source code to synchronize with the page and reload.
Help	Help for debugging the window.

## **User self-registration**

With the Admin module, administrators can choose to have end users self-register for new accounts from the login screen if the user is not already in the ServiceCenter database. When the user registers, ServiceCenter creates an Operator record and a Contact record for the new user with basic user login rights. See the *Security* chapter in this guide for more information about the registration process.

#### To enable users to self-register from the Login screen:

- 1 From the Admin module Settings page, click Common.
- **2** Scroll to Enable User Registration.



Click Yes to give users the ability to self-register for new accounts.

#### 3 Click Yes.

**Tip:** When using an application with ServiceCenter 5.0 as the back-end system, the first name and last name are reversed in the ServiceCenter contact record from the format used in an OAA Platform application.

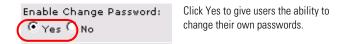
ServiceCenter 5.0 stores names in the format last name/first name. The OAA Platform stores names in the format first name/last name. As a temporary solution, you can change the way operator names are handled in ServiceCenter using the Use Operator Full Name? option in the Environment records for Incident and Service Managements. Refer to the ServiceCenter 5.x Application Administration Guide for instructions.

## **Changing passwords**

Using the Admin module, administrators can choose to have end users change their own passwords from the Home page.

#### To enable users to change passwords:

- 1 From the Admin module Settings page, click Common.
- 2 Scroll to Enable Change Password.



3 Click Yes.

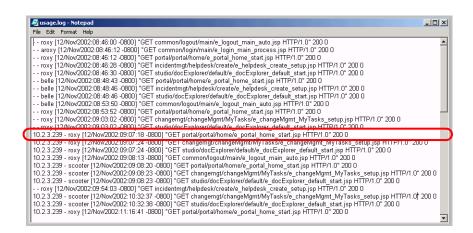
## Logging and monitoring user sessions

The usage.log file has a record of user logins that is in the bin directory of your application server installation. With this file, you can determine which application is in use and how many users access an application during a day.

### Understanding the usage.log file

The following line shows an excerpt from a usage.log file:

10.2.3.239 - roxy [12/Nov/2002:09:07:18 -0800] "GET portal/portal/home/e\_portal\_home\_start.jsp HTTP/1.0" 200 0



Each login is on a line. Within one user session, each module logs only one line.

The following table shows the meaning of each element in the log entry:

Remote Host	Rfc931	User Login	Date	Request	Status	Bytes
10.2.3.239	-	roxy	[12/Nov/ 2002:09:07: 18 -0800]	"GET portal/portal/home/ e_portal_home_start.jsp HTTP/1.0"	200	0

This element	Contains
Remote Host	the remote host name or IP address if the DNS host name is not available or was not provided.
Rfc931	the remote login name of the user. This is always a dash because this information is not needed.
User Login	the user name authenticated to log in to the Peregrine Portal.
Date	the date and time of the request.
Request	the module accessed by the user. The name of the module is the first part of the GET parameter. In the previous above, the module accessed is <i>notificationservices</i> , the location of the login script.
Status	the HTTP response code returned to the client. This value is always 200 to specify that it was a valid request.
Bytes	the number of bytes transferred. The number is always entered as 0, because this information is not needed.

# **8** Get-Answers Security

This chapter describes the different security configuration options available in Get-Answers. Topics in this chapter include:

- Password encoding methods on page 174
- *User registration* on page 175
- Authenticating users on page 176
- Default security configuration on page 177
- Custom JAAS configuration on page 178
- Standard Sun Microsystems JAAS configuration on page 187
- Integrated Windows Authentication on page 188
- *Integrating with single sign-on tools* on page 197
- *Contact-based authentication* on page 202
- Creating an alternate login page on page 209

## Password encoding methods

By default, Get-Answers does not encode passwords sent over the network. Get-Answers sends plain text passwords to the authenticating back-end databases and stores plain text passwords in a browser cookie if the user selects to **enable automatic login**. If you want to secure your Get-Answers passwords, you have three options:

- Enable Secure Sockets Layer (SSL) on your Web server
- Configure Get-Answers to use a directory service such as LDAP
- Enable your Web server to use Windows NT Challenge/Response

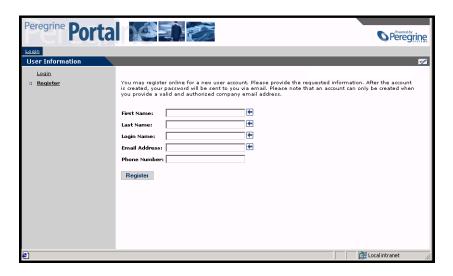
In order to use SSL, you need to acquire a digital certificate. If your Web server has a certificate, then your Get-Answers login URL must include the https protocol indicator. After the user browser has made a secure connection to the Web server, all data transferred is encrypted. Refer to your Web server documentation for information on configuring SSL.

Get-Answers also supports authentication via a directory service such as LDAP. When you authenticate to a directory service, Get-Answers passes SHA hash encoding passwords to the service. For instructions configuring a directory service see *Custom JAAS configuration* on page 178.

Get-Answers also supports Integrated Windows Authentication. When this form of authentication is used, passwords are not actually exchanged between the browser and Web server, and the authentication process is kept secure. However, Integrated Windows Authentication is only supported by Internet Explorer browsers on Windows systems. For instructions configuring Integrated Windows Authentication see *Integrated Windows Authentication* on page 188.

### **User registration**

All Get-Answers users need a login account. If a user is attempting to log in for the first time, the user is prompted for certain default information as shown in the following page. The first four fields are required, as indicated by the arrows to the right of each field.



When the user clicks **Register**, the information is stored in the appropriate database.

Basic registration information and login scripts are stored in the .../oaa/apps/common/jscript/ directory. Login scripts are in the login.js file. If you want to make changes to the registration process, such as changing the way a user's password is defined, you can change the scripts in this directory.

### **Enabling the E-mail adapter**

If users have the ability to self-register, you must make sure that the E-mail tab from the Get-Answers Admin module Settings page contains the MailAdapter name.

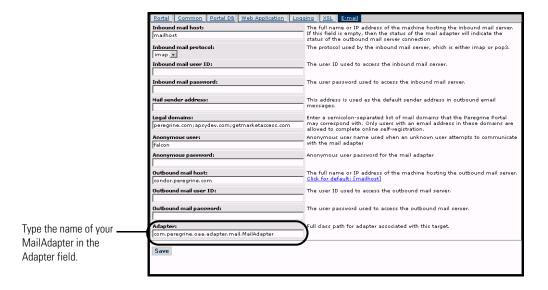
The MailAdapter is an implementation of JavaMail API 1.2 and supports the following mail protocols:

POP3 for inbound mail

- IMAP for inbound mail
- SMTP for outbound mail

The MailAdapter also supports MIME type attachments in outbound e-mail.

Set the following parameters, as needed, on the E-mail tab of the Admin module Settings page.



### **Troubleshooting the MailAdapter connection**

You can check the status of the MailAdapter connection on the Control Panel. If the adapter shows as *disconnected*, check that the settings on the E-mail tab of the Settings page are correct. If you are still unable to connect, contact your system administrator for verification of the parameter values.

## **Authenticating users**

You can configure the Peregrine OAA Platform to use one of five security authentication options:

• Use the default configuration to authenticate users against Peregrine adapters. See *Default security configuration* on page 177.

- Use a custom configuration to authenticate users against user-defined adapters such as LDAP or JDBC compliant databases. See *Custom JAAS configuration* on page 178.
- Use a standard JAAS configuration to authenticate users against the Sun Microsystem's standard Java Authentication and Authorization Service (JAAS). See Standard Sun Microsystems JAAS configuration on page 187.
- Use Integrated Windows authentication to authenticate users and pass the information to the Web application. See *Integrated Windows* Authentication on page 188.
- Use an alternate login page and authenticate users against any of the other login options. See *Creating an alternate login page* on page 209.

Once a user is authenticated, the modules to which the user has access are defined by the back-end system. If you are using ServiceCenter for the back-end system, the user must have the appropriate capability words set in the Operator record in ServiceCenter in order to see the corresponding module in the web application.

# **Default security configuration**

The default configuration authenticates users against a set of pre-configured JAAS login modules. By default, one JAAS login module is configured for each registered Peregrine adapter. For example, if you are using both AssetCenter and ServiceCenter, then Get-Answers creates login modules for *both* the ACAdapter and the SCAdapter.

These login modules are *only* used to authenticate users. User access rights are derived from user profile records in the back-end systems (for example, ServiceCenter or AssetCenter). User access rights determine which modules the user can access and what tasks they can perform within those modules. For example, one user can open tickets only, while another has rights to approve tickets as well.

You do not have to do any additional configuration to use the default security configuration. Get-Answers automatically generates login modules for each Peregrine adapter installed on the system.

The default login module settings are:

loginModule=com.peregrine.OAA.security.OAALoginModule

- control flag=OPTIONAL
- options=<none>

## **Custom JAAS configuration**

A custom JAAS configuration authenticates users against a set of JAAS LoginModules you define in a local.xml file. This file contains the settings to use for each JAAS LoginModule. A <jaas\_config> entry in local.xml has the following format.

The following table describes how to use the XML tags and assign appropriate values.

#### **Important:** XML is case sensitive.

Use these XML tags	To do this
<jaas_config> </jaas_config>	Define a custom JAAS configuration. All JAAS configuration settings must be between these two tags.
<jaasconfiguration> </jaasconfiguration>	Define the name of your custom JAAS LoginModule. The value of this tag determines the tag name to use for the next tag. For example, if you create a custom configuration with the value CustomConfig, then you must use the tags <customconfig> and </customconfig> to define the list of adapters used.
<customconfig> </customconfig> This is a user definable tag	Define the list of <i>all</i> adapters that you want to use for authentication. Use semicolons between entries to specify multiple adapters.
	If the adapter name you list does not match a registered AdapterPool, then Get-Answers assumes the name is the logical name of a non-OAA LoginModule.
	Get-Answers attempts to authenticate users against each adapter you list. The values listed in this tag determine the tags names to use for each adapter. For example, if you create two adapters adapter1 and adapter2, then you must use the tags <adapter1>, </adapter1> , <adapter2> to define your adapters.</adapter2>
<adapter1> </adapter1> <adapter2> </adapter2> These are user definable tags	Define the JAAS LoginModule settings for each adapter. Each adapter <i>must</i> have both <loginmodule> and <controlflag> tags defined for it.</controlflag></loginmodule>

Use these XML tags	To do this
<loginmodule> </loginmodule>	Define the fully qualified class name of the JAAS LoginModule.
	This is required only when authenticating agains non-OAA LoginModules (adapters). The default value is com.peregrine.oaa.archway.security.  OAALoginModule.
	This is <i>optional</i> only when authenticating against Peregrine back-ends.
<pre><controlflag> </controlflag> This tag is optional.</pre>	Define the authentication behavior of this LoginModule. The default value is REQUIRED.
	See <i>JAAS LoginModule control flags</i> on page 180 for a description of available options.
<pre><options> </options></pre>	Define the list of authentication options. Use semicolons between entries to specify multiple options. This is an <i>optional</i> setting for each JAAS LoginModule you use. See <i>JAAS configuration options</i> on page 183 for a description of available options.

# JAAS LoginModule control flags

The following table lists the possible settings for the <controlFlag> tag. A JAAS LoginModule can have one of four behaviors:

Control flag	Authentication behavior
REQUIRED	If the user cannot be authenticated against the adapter, the login fails. Whether it succeeds or fails, authentication continues to the next LoginModule in the list.
REQUISITE	If the user cannot be authenticated against the adapter, the login fails. If it succeeds, authentication continues to the next LoginModule in the list.

Control flag	Authentication behavior
SUFFICIENT	Authentication can proceed even if this LoginModule fails. If it succeeds, authentication does not continue to the next LoginModule in the list. If it fails, authentication continues to the next LoginModule in the list.
OPTIONAL	Authentication can proceed even if this LoginModule fails. Whether it succeeds or fails, authentication continues to the next LoginModule in the list. This is the default behavior.

**Note:** ControlFlag settings are case insensitive.

The overall authentication succeeds only if all Required and Requisite LoginModules succeed. If a Sufficient LoginModule is configured and succeeds, then only the Required and Requisite LoginModules prior to that Sufficient LoginModule need to have succeeded for the overall authentication to succeed. If no Required or Requisite LoginModules are configured for an application, then at least one Sufficient or Optional LoginModule must succeed.

By default, the controlFlag setting of all Get-Answers Web applications LoginModules is Optional. For most enterprises, this is the desired configuration.

The following table shows some sample scenarios and how the login process works.

Module Name	Status	Scenario 1	Scenario 2	Scenario 3
LoginModule1	required	pass	pass	fail
LoginModule2	sufficient	fail	fail	fail
LoginModule3	requisite	pass	pass	pass
LoginModule4	optional	pass	fail	fail
Final Authentication		pass	pass	fail

In Scenario 1, authentication succeeds even though LoginModule2 fails. This is because the Required loginModule takes precedence over the sufficient loginModule.

In Scenario 2, authentication succeeds because the loginModules that failed are only Sufficient and Optional.

Scenario 3 authentication fails because a loginModule with a status of Required failed.

## **JAAS** configuration options

The following tables list the possible settings for the <options> tag.

#### **Standard JAAS Options**

The following table lists the standard JAAS options available for all adapters.

Option	Use	Description
debug=true	optional	Instructs a LoginModule to output debugging information. The OAALoginModule logs debugging information to stdout and not to archway.log.
tryFirstPass=true	optional	The first LoginModule in the list saves the password entered and this password is used by subsequent LoginModules. If authentication fails, the LoginModules prompt for a new password and repeats the authentication process.
useFirstPass=true	optional	The first LoginModule in the list saves the password entered and this password is used by subsequent LoginModules. If authentication fails, LoginModules do not prompt for a new password.
storePass=true	optional	Stores the password for the user being authenticated.
clearPass=true	optional	Clears the password for the user being authenticated.

## Peregrine JndiLoginModule options

The following table lists the options available to custom JAAS LoginModules using the Peregrine JndiLoginModule.

**Note:** The Peregrine JAAS LoginModule

com.peregrine.oaa.security.JndiLoginModule is modeled after Sun's JndiLoginModule. The main difference is that an RFC 2307 (NIS over LDAP) compliant schema is not required. User must have "uid" and "userPassword" properties defined.

Option	Use	Description
user.provider.url	required	Use this option to provide the URL to the starting point in your directory service where you want to search for users.
		For example, ldap://server/dc=peregrine,dc=com
		<b>Note:</b> This option corresponds to the Java constant Context.PROVIDER_URL.
security.principal	optional	Use this option to specify which directory service user you want to use to authenticate non-anonymous queries of your directory service. Use the DN of the directory service user. For example, uid=user,dc=peregrine,dc=com
		<b>Tip:</b> To prevent user passwords from being visible to users, you should only set this option if you are using a directory server such as IPlanet where user passwords are SHA hashed by default.
		<b>Note:</b> This option corresponds to the Java constant Context.SECURITY_PRINCIPAL.

ssword for the tion should the the
_
ication nis password s plain text.
l, either enable ssl option) or that protects
s to the Java ENTIALS.
able an SSL ginModule option has two
to the Java
able ectory service. f two values:
llue for
s to a value of
ole but
or has zero ation resets to
to the Java

Option	Use	Description
user.search.scope	optional	Use this option to specify the number of levels to descend when searching for the user being authenticated by user.provider.url. This value must be an integer. The default value is 1.
		<b>Note:</b> This option corresponds to the Java constant SearchControls.ONELEVEL_SCOPE.
group.provider.url	optional	Use this option to provide the URL to the starting point in your directory service where you want to search for groups.
		For example,
		ldap://server/dc=peregrine,dc=com
		<b>Note:</b> This option corresponds to the Java constant Context.PROVIDER_URL.
group.search.scope	optional	Use this option to specify the number of levels to descend when searching for a group. This option should only be used with group.provider.url. This value must be an integer. The default value is 1.
		<b>Note:</b> This option corresponds to the Java constant SearchControls.ONELEVEL_SCOPE.
group.search.objectClass	optional	Use this option to specify the name of the LDAP group objectClass. Valid values are:
		■ groupOfNames (Default value)
		■ groupOfUniqueNames.
		■ groupOfUrls
		<b>Note:</b> Either groupOfNames or groupOfUniqueNames can be used to define static groups in LDAP, but they may not be used together.
		If you choose the groupOfUrls option, then you are configuring dynamic groups. No additional configuration settings are required to recognize dynamic groups.
storeIdentity=true	optional	Use this option to store a reference to the User being authenticated.
clearIdentity=true	optional	Use this option to clear a reference to the User being authenticated.

## **Example: Defining an LDAP custom configuration**

The following XML code is an example of how to define a loginModule to authenticate users against an LDAP directory service.

**Note:** LDAP is not an adapter and does not imply any other functionality.

```
<jaas_config>
 <jaasConfiguration>myConfig</jaasConfiguration>
   <myConfig>ldap</myConfig>
 <ldap>
   <loginModule>
   com.peregrine.oaa.security.JndiLoginModule
   </loginModule>
   <options>
   user.provider.url=ldap://server/dc=peregrine.dc=com;
   group.provider.url=ldap://server/dc=peregrine,dc=com
   </options>
 </ldap>
</jaas_config>
```

# Standard Sun Microsystems JAAS configuration

The standard JAAS configuration option authenticates users against the Sun Microsytems formatted JAAS configuration. To enable the standard JAAS configuration, you must edit the local.xml file and add the following lines:

```
< jaas config>
  <useStandardJAASConfiguration>true</useStandardJAASConfiguration>
</jaas config>
```

If you choose to use the standard JAAS configuration, then you must also do one of the following two things:

 Specify the appropriate JAAS command line options when the container is started

-or-

 Configure the java.security file in \$JAVA HOME/jre/lib/security for JAAS.

## **Command line options**

The command line properties required for use of the standard file-based configuration are as follows:

```
java -classpath <list of jars> \
    -Djava.security.manager \
    -Djava.security.policy==java2.policy \
    -Djava.security.auth.policy==jaas.policy \
    -Djava.security.auth.login.config==jaas.config \
    <MyMainClass>
```

For *< list of jars>*, enter the list of jars used by your JAAS-enabled Java application.

For *MyMainClass*>, enter the fully qualified class name of the Java main program class.

# **Integrated Windows Authentication**

Windows Integrated Authentication (known as NT/Challenge Response in previous versions of Windows) is one of the ways Windows facilitates the authentication of users on a Web server. The process consists of a secure handshake between Internet Explorer (IE) and the Internet Information Server (IIS) Web server. The handshake lets the Web server know exactly who the user is, based on how they logged in to their workstation. This allows the Web server to restrict access to files or applications based on who the user is. Applications running on the Web server can use this information to identify users without requiring them to log in.

Get-Answers uses Integrated Windows Authentication as follows:

- The user logs in to a Windows XP/2000/NT workstation.
- The user starts the IE browser and navigates to the login.asp page.
- IE automatically sends user authentication information to IIS. The user's password is not transferred, but the Integrated Windows Authentication handshake between IE and IIS is enough for the server to recognize the user.
- The Web application login automatically detects the user by using the Integrated Windows Authentication/IIS server data.
- The user is logged in without requiring that a name and password be entered.

During this process, the back-end database authenticates and impersonates the Windows user with each of its adapters.

The following circumstances are exceptions to the normal Integrated Windows Authentication login process:

- The Windows user has already registered with a back-end database adapter. When this occurs, Get-Answers asks the user to register and enter profile information. Get-Answers then lets the user log in and stores this information for future login attempts.
- The Windows user name is not already registered as an Administrator in the back-end system. When this occurs, the web application does not proceed with automatic login. The user is presented with another login screen and is asked to verify their password. This step is an added security measure to prevent a user from accidentally logging in with administrative rights.

## **Setting up Integrated Windows Authentication**

This section describes how to configure Get-Answers to use IIS for Integrated Windows Authentication while using Apache as the primary Web server. You can also follow these instructions if you use IIS as your primary Web server.

It is a seven-step process:

- **Step 1** Verify that all users have an Operator record in the appropriate back-end database. See *Creating an Operator record* on page 190.
- **Step 2** Install and configure Get-Answers with Apache and Tomcat. See *Preparing to configure Integrated Windows Authentication* on page 190.

**Note:** Tomcat/Apache is the preferred configuration for Get-Answers.

- **Step 3** Set Web server properties for the login.asp file. See *Setting Web server* properties for the login.asp file on page 190.
- **Step 4** Set Web server properties for the e\_login\_main\_start.asp file. See *Setting Web server properties for the e\_login\_main\_start.asp file* on page 192.
- **Step 5** Set Web server properties for the loginverify.asp file. See *Setting Web server* properties for the loginverify.asp file on page 195.

- Step 6 Set the Require Windows NT Challenge/Response Authentication parameter, and optionally the Default User Login Name and Default Login User Password parameters from the Get-Answers administration page. See Setting the Admin parameters on page 196.
- **Step 7** Optionally, define the **LogoutURL** from the Get-Answers administration page. This step is necessary when Get-Answers and IIS reside on different servers. See *Setting up the LogoutURL* on page 197.

The following procedures illustrate how to setup Integrated Windows Authentication using Windows 2000 as an example. If you are using Windows XP, the overall procedure is the same. The IIS Management Console is called Internet Information Services.

#### **Creating an Operator record**

All users must have a back-end database Operator record. Contact your AssetCenter or ServiceCenter administrator to verify that users have Operator records. Create an Operator record as needed.

#### **Preparing to configure Integrated Windows Authentication**

**Note:** If you are not using the preferred Tomcat/Apache configuration, skip this section.

- 1 Install and configure Get-Answers with Apache and Tomcat, and verify that you can log in through login.jsp.
- **2** On a server running IIS, create a virtual directory named **oaa**. This virtual directory must have read access and permission to run scripts.
- **3** From the Get-Answers deployment directory, copy the following files to the oaa virtual directory on the IIS server:
  - login.asp
  - loginverify.asp
  - e\_login\_main\_start.asp

The default Get-Answers deployment directory is:
C:\Program Files\Peregrine\Common\Tomcat4\webapps\oaa

#### Setting Web server properties for the login.asp file

**Note:** If you are using IIS for your Web server, go directly to step 3.

1 On the IIS server, edit login.asp using a text editor.

Edit <FORM... action...> and change it from login.jsp to the absolute URL of login.jsp on the Apache server.

#### For example, change from:

```
<FORM name="f" action="login.jsp" method="post">
to:
<FORM name="f" action=
"http://<apacheserver.mycompany.com>/oaa/login.jsp" method="post">
```

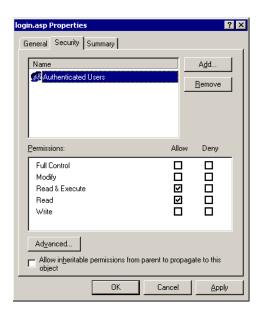
- 2 Open the IIS Management Console (Start>Programs>Administrative Tools>Internet Information Services).
- **3** Click on the oaa virtual directory.
- 4 Right-click on login.asp and select Properties.
- **5** Select the File Security tab.
- 6 Click Edit in the Anonymous Access and Authentication Control section and set the permissions as follows:
  - a Disable Anonymous access.
  - **b** Require Integrated Windows authentication.

Authentication Methods X Anonymous access No user name/password required to access this resource. Account used for anonymous access: Authenticated access For the following authentication methods, user name and password are required when anonymous access is disabled, or - access is restricted using NTFS access control lists Basic authentication (password is sent in clear text) Select a default domain: Digest authentication for Windows domain servers. Integrated Windows authentication OΚ Cancel Help

Clear the Anonymous access check box.

Select the Integrated Windows authentication check box.

- 7 Click OK on all windows displayed until you return to the Microsoft Management Console.
- **8** From Windows Explorer, update the following properties to login.asp.
  - **a** Add the **Authenticated Users** group to the list of authorized users.
  - **b** Grant the following **Permissions** to the Authenticated Users group:
    - Read & Execute Allow
    - Read Allow



#### Setting Web server properties for the e\_login\_main\_start.asp file

**Note:** If you are using IIS for your Web server, go directly to step 3.

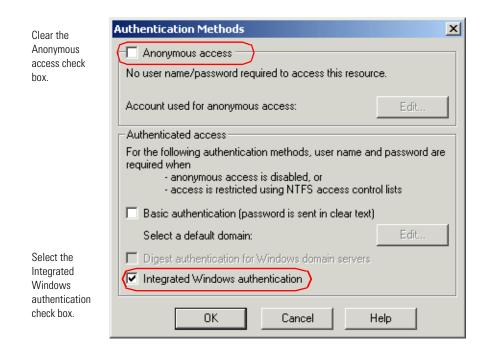
1 On the IIS server, edit e\_login\_main\_start.asp using a text editor.

Edit <FORM... action...> and change it from e\_login\_main\_start.do to the absolute URL of e login main start.do on the Apache server.

For example, change from:

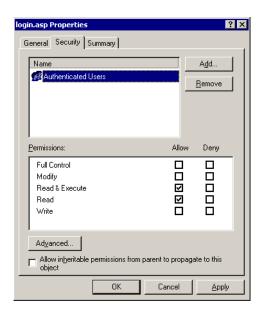
```
<FORM name="f" action="e_login_main_start.do" method="post">
to:
<FORM name="f" action="http://<apacheserver.mycompany.com>
/oaa/e_login_main_start.do" method="post">
```

- 2 Open the IIS Management Console (Start>Programs>Administrative Tools>Internet Information Services).
- **3** Click on the oaa virtual directory.
- 4 Right-click on e\_login\_main\_start.asp and select Properties.
- 5 Select the File Security tab.
- 6 Click Edit in the Anonymous Access and Authentication Control section and set the permissions as follows:
  - a Disable Anonymous access.
  - **b** Require Integrated Windows authentication.



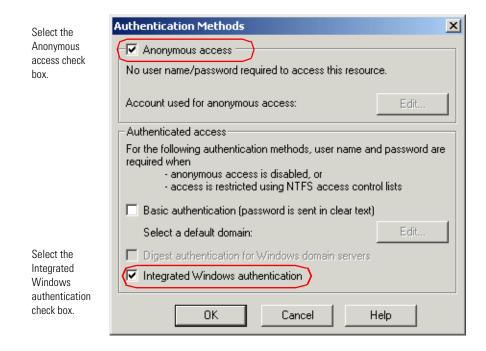
- 7 Click OK on all windows displayed until you return to the Microsoft Management Console.
- 8 From Windows Explorer, update the following properties to e\_login\_main\_start.asp.
  - **a** Add the **Authenticated Users** group to the list of authorized users.
  - **b** Grant the following **Permissions** to the Authenticated Users group:
    - Read & Execute Allow

#### ■ Read – Allow



#### Setting Web server properties for the loginverify.asp file

- 1 Open the IIS Management Console (Start>Programs>Administrative Tools>Internet Information Services).
- **2** Click on the oaa virtual directory.
- 3 Right-click on loginverify.asp and select Properties.
- 4 Select the File Security tab.
- 5 Click Edit in the Anonymous Access and Authentication Control section.



- 6 Verify that Anonymous access and Integrated Windows authentication have a check.
- 7 Click OK on all windows displayed until you return to the Microsoft Management Console.
- **8** Close the Management Console.

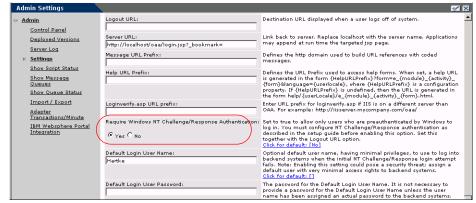
#### Setting the Admin parameters

You must set the Require Windows NT Challenge/Response Authentication parameter to Yes if you want only users who have a Windows account to log in. Users without Windows authentication can still have login capabilities by assigning a Default Login User Name.

**Warning:** The default login user has whatever capabilities you assign in the ServiceCenter or AssetCenter back-end. When you enable this feature, anyone can log in. Assign minimal user rights to this user.

#### To set Windows NT Challenge/Response Authentication:

- 1 Open a Web browser.
- 2 Enter the following URL: http://<webserver>/<oaa>/admin.jsp in the browser address field (where <webserver> is the name of your Web server and <oaa> is the name of the virtual directory created during installation).
- 3 Login using the administrator name and password.
- 4 From the Administration Home page, click Settings.



Select the Yes option in Require Windows NT Challenge/Response Authentication to allow only Windows users to log in.

- 5 From the Common tab, set the Require Windows NT Challenge/Response Authentication parameter to Yes.
- **6** To allow users without Windows authentication to login, assign a Default Login User Name, and optionally a password.
- 7 Click Save, then click Reset Server.

#### Setting up the LogoutURL

**Note:** This step is necessary when Get-Answers and IIS reside on different servers.

- 1 From the Administration home page (see *To set Windows NT Challenge/Response Authentication:* on page 196), click **Settings**.
- 2 From the Common tab, set the LogoutURL setting to the URL you want users to go to if Integrated Windows Authentication fails or is not possible due to the user's current browser.
- 3 Click Save, then click Reset Server.

## **Testing the settings**

Log in to your Peregrine Web application to make sure the access permissions are set correctly. The Integrated Windows Authentication settings are activated when you log in through a special login page named login.asp. Accessing your applications through the standard login.jsp page results in the users needing to log on as usual.

#### To test the settings:

- 1 Open a Web browser.
- 2 Enter the following URL: http://<webserver>/<oaa>/login.asp in the browser address field (where <webserver> is the name of your Web server and <oaa> is the name of the virtual directory created during installation).
- 3 Verify that access to Get-Answers is what you expected based on the settings you chose for the login.asp and loginverify.asp files.

# Integrating with single sign-on tools

You can integrate Get-Answers with a single sign-on tool such as SiteMinder to eliminate displaying the Get-Answers login screen. When you integrate with a single sign-on tool, Get-Answers users browse to a special URL that obtains their user information from the sign-on tool and then automatically logs them in if the sign-on tool validates them. The following steps are for integrating Get-Answers with a third-party single sign-on tool. If you want to use Integrated Windows Authentication on page 188.

#### To integrate with a single sign-on tool:

1 Choose or create one user record for each single sign-on user you want to access Get-Answers. Each user record must have a password and a list of capability words or user rights.

**Important:** The back-end database user record is required to determine what portions of the Get-Answers interface the user can access.

- 2 Open a text editor such a NotePad.
- 3 Create a new JSP file to be the target of your automatic login URL. You can use the following code as a template:

```
Add JSP code here to
                     <%@ include file="jspheader.jsp" %>
                     <%
obtain the user name
of the person that the
                      // Add JSP code that obtains proper user name from
single sign-on tool has
                     _// the third party single-sign on tool
authenticated -
                    // Replace "user" with the user name obtained above
Replace the value -
                     -String sUser = "user";
"user" with the user
name obtained from
                      // Turn on OAA pre-authentication
                      user.setPreAuthenticated(true);
your single sign-on tool
                     %>
                     <HTML>
                     <BODY>
                       <FORM name="f" action="login.jsp" method="post">
                         <INPUT type="hidden" name="loginuser" value="<%=sUser%>" />
                       </FORM>
                     </BODY>
                     </HTML>
                     <SCRIPT LANGUAGE="JavaScript">
                      self.document.forms[0].submit()
                     </SCRIPT>
```

- **4** Add any necessary JSP code to query your single sign-on tool for the name of the user who has been pre-authenticated.
  - Typically, these tools use HTTP headers to submit this information. See your single sign-on tool API documentation for details.
- **5** Save the file as **autologin.jsp** in your application server's presentation folder. For example:

**Note:** The name you choose for the JSP file will be the file name required in the URL.

## Testing access to Get-Answers from a single sign-on tool

You can use the following steps to test access to Get-Answers from your single sign-on tool.

#### To test your single sign-on settings:

- 1 Login to your single sign-on tool.
- **2** Open a browser and go to the following URL:

http://<server\_name>/oaa/autologin.jsp

If you configured the login settings correctly you will be authenticated and redirected automatically to the Get-Answers home page.

**Note:** If you saved the automatic login page with a different file name, then use that file name instead of autologin.jsp.

## **Authentication models**

The following sections discuss:

- *ServiceCenter authentication components*
- *OAA* contact and operator associations
- Regular operator authentication
- Contact-based authentication

## ServiceCenter authentication components

There are two components of the ServiceCenter authentication model: the Operator file and the Contacts file.

The Operator file contains the following keys:

- The name field is the primary key (unique and indexed).
- The full.name field is a foreign key to the contact table. It represents the contact associated with the operator. It is indexed, it can be empty, and several operators can have the same value for this field. The value of the full.name field, when not empty, represents the value of the contact.name field in one of the records in the contacts file.

The Contacts file contains the following keys:

- The contact.name field is the primary key; it is unique and indexed.
- The user.id field is indexed and is a "no duplicate" field; it can be null, but must be unique if not null. When contact-based authentication is enabled, the user.id field is the key used to look up contacts.

## **OAA** contact and operator associations

OAA approaches contact and operator handling by allowing ServiceCenter administrators to customize their Contacts and Operator files, and to use Contacts and Operator associations that differ from OAA defaults.

The OAA schemas allow flexibility in defining associations between records in the Contacts and Operator files. These OAA schemas provide a logical view that is "wrapped around" their physical implementations. OAA provides attribute names that correspond to each type of lookup operation. Therefore, for an administrator, customizing the lookup is as simple as creating a schema extension on the Profile or the Contact schema. For more information about schemas refer to the "Schemas" chapter in this guide.

# Regular operator authentication

Name and password pairs are validated against the existing operator in the operator table. In addition, the presence of a contact that corresponds to the operator's contact is queried based on the fields mentioned below.

**Note:** If a contact for the corresponding operator's contact is not found, OAA creates a contact automatically.

## Algorithm for looking up contacts

The Contact schema has the following attributes:

Logical name	Mapping in profile schema	Mapping in contact schema
OperatorContactKey1	full.name	contact.name
OperatorContactKey2	Name	user.id

Using these attributes, the lookup algorithm is the following:

- 1 Read the values for OperatorContactKey1 and OperatorContactKey2 in the Profile schema whose UserName equals the UserName (login) of the operator who is logged in.
- **2** Search the **Contact** schema for a record whose Id is the value of OperatorContactKey1.
- 3 If exactly one record is found, return this contact's Id.
- **4** If no record, or more than one record, is found, search the **Contact** schema for a record whose Id equals the value of OperatorContactKey2.
- 5 If exactly one record is found, return this contact's Id.
- **6** If no record, or more than one record, is found, return null and attempt to create the contact. (See the section *Contact creation* below.)

#### **Contact creation**

All the information from the Profile record for the logged in operator is used to create a record in the Contact schema. Therefore, all the Profile values that have a corresponding attribute in the Contact schema are saved in the database. In addition, the ProfileId record in the Contact schema (see below for mapping) is assigned the value of the Profile record's Id in order map the Contact to the Profile. The following tables describe both the logical and physical mappings of particular fields of interest during contact creation.

#### **Logical mapping**

Logical name in Profile schema	Logical name in Contact schema
Id	ProfileId
UserName	UserName
FullName	Id

#### **Physical mapping**

Logical name in Profile schema	Logical name in Contact schema
Name	operator.id
name	user.id
full.name	contact.name

## **Contact-based authentication**

This section describes an alternate authentication scheme that automatically verifies Windows users as ServiceCenter contacts.

You can configure Get-Answers to automatically log in specific groups of authenticated Windows users as one or more pre-defined Operators in ServiceCenter. Each group of Windows users has its own login page.

**Note:** The authentication scheme described below requires that both the user who is logged into the machine running the client browser *and* the IIS server reside either in the same domain, or in different domains that have a trusted relationship.

Perform the following steps:

- **Step 1** Look up the contact at login. See *Looking up the contact at login* on page 203.
- **Step 2** Choose or create one Operator record in ServiceCenter for each group of Windows users you want to authenticate. See Creating an Operator record in ServiceCenter on page 204.
- **Step 3** Create a contact record in ServiceCenter for each Windows user who you want to be able to log in. See *Creating a contact record* on page 204.
- **Step 4** From the Windows domain server, add a Windows group for each Operator that you defined in step 2. Refer to your Windows documentation for more information on adding groups. See Adding groups on page 205.
- **Step 5** Create a login ASP file for each Operator defined in step 2. See *Configuring* the login ASP file on page 205.
- **Step 6** Configure each login ASP file to be exclusive to each Windows group defined in step 4. See Setting properties for the login ASP file on page 206.
- **Step 7** On the Get-Answers Admin module Settings page, click the Common tab, scroll down to the Encoding, Locales, and Sessions section, and make sure that Require Windows NT Challenge/Response Authentication is set to No.
- **Step 8** Edit local.xml in <application server>\oaa\WEB-INF to define the passwords for each Operator defined in step 4. See *Editing the local.xml file* on page 208.

#### Looking up the contact at login

OAA uses the ServiceCenter the user id field in the contacts file to look up a contact for contact-based authentication. However, some administrators use this field to hold employee IDs (such as numeric employee IDs, badge number, and Social Security number) rather than network names (which are applicable when Integrated Windows Authentication is enabled). UserName is the logical name in the Contact schema for the user.id field. Through a schema extension, administrators can customize this to point to a different field or a newly defined field.

Logical name	Mapping in Contact schema
UserName	user.id

The contact lookup algorithm ensures that there is only one match for a given UserName. Otherwise, authentication is denied.

#### Creating an Operator record in ServiceCenter

Choose or create one Operator record for each group of users or role you want to access Get-Answers. Each Operator must have a password and a list of capability words. For example, you can define one Operator with default access (scdefault) and one Operator with manager access (scmgr). Refer to your ServiceCenter documentation for more information on adding Operator records.

The following procedures describe how to use scdefault and scmgr as the Operators.

#### Using Operator records in ServiceCenter:

- 1 Create two Operator records: scdefault and scmgr.
  - Refer to your ServiceCenter documentation for information on adding Operator records.
- 2 Add the Get-Answers capability words you want users assigned to this Operator to have. For example:

Operator	Capability words
scdefault	getit.service getit.personalization.default
scmgr	getit.service getit.itemployee getit.itmanager getit.personalization.default

**Note:** Each Operator will use its own login page.

In this example, users who log in to logindefault.asp have the capabilities of the scdefault Operator in ServiceCenter. Users who log in to loginmgr.asp have the capabilities of the scmgr Operator in ServiceCenter.

3 Assign a password to each Operator.

**Note:** The password must match the password defined in *Editing the local.xml file* on page 208.

#### Creating a contact record

Create a contact record for each Windows user who you want to be able to log in. The Employee ID field of the contact record must match the Windows user name exactly, including upper- and lower-case.

For more information about creating contact records, see the Service Center System Administration Guide.

#### **Adding groups**

You must have an equivalent Windows group for each Operator that you want to authenticate. For example:

Operator	Suggested group
scdefault	Authenticated Users (default Windows group)
scmgr	Managers (created on domain server)

Refer to your Windows documentation for adding groups to Windows.

#### Configuring the login ASP file

You must configure or create a separate login ASP file for each Operator you define (see Creating an Operator record in ServiceCenter on page 204). Each file needs a unique name.

Two sample login ASP files, logindefault.asp and loginmer.asp are in the Get-Answers deployment directory: <application server>\oaa

#### To configure the login ASP file:

1 Create a unique login file for each Operator.

For example, create logindefault.asp for scdefault and create loginmer.asp for scmgr.

- **a** Copy logindefault.asp from the deployment folder: <application server>\oaa
- **b** Paste the file in the same folder and rename the copied file.

**Note:** Whatever file name you choose becomes part of the URL users enter to access Get-Answers. For example, if the file name is mylogin.asp, the URL is: http://yourhostname/oaa/mylogin.asp.

**2** Edit the value of the OPERATOR form input to match the Operator you defined in *Creating an Operator record in ServiceCenter* on page 204.

**3** Save and close the file.

#### Setting properties for the login ASP file

You must configure each login ASP file to be exclusive to each Windows group. This requires changing the authentication method in IIS and setting the file security properties in Windows.

#### To change the authentication method in IIS:

- 1 Open the IIS Management Console (Start > Programs > Administrative Tools > Internet Information Services).
- **2** Navigate to the oaa virtual directory.
- **3** For each Operator, navigate to the ASP file that you created in *Configuring* the login ASP file on page 205.
  - For example, navigate to logindefault.asp for scdefault; navigate to loginmgr.asp for scmgr.
- 4 Right-click on the file and select **Properties**.
- **5** Select the File Security tab.
- 6 Click Edit in the Anonymous Access and Authentication Control section and set the permissions as follows:
  - a Disable Anonymous access.



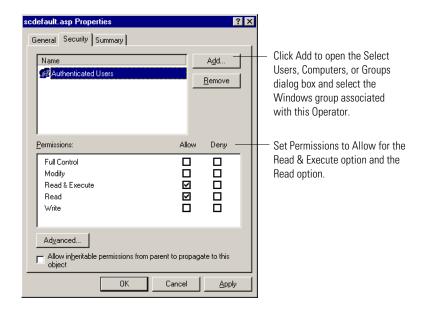
**b** Require Integrated Windows authentication.

7 Click OK on all windows displayed until you return to the Microsoft Management Console.

#### To set the file security properties in Windows:

- 1 Open Windows Explorer.
- 2 Browse to your deployment folder: <application server>\oaa
- 3 Update the following login ASP properties.
  - a Right-click on your login ASP file; for example, scdefault.asp, and click Properties.

**b** Add the user group associated with this Operator; for example, Authenticated Users.



- **c** Grant the following **Permissions** to the Authenticated Users group:
  - Read & Execute Allow
  - Read Allow
- d Click OK.
- 4 Repeat step 3 for each login ASP file.
- 5 On the Get-Answers Admin module Settings page, click the Common tab, scroll down to the Encoding, Locales, and Sessions section, and make sure that Require Windows NT Challenge/Response Authentication is set to No.

#### Editing the local.xml file

You must identify the password for each Operator that you defined in the local.xml file. This file is located at:

<application server>\oaa\WEB-INF\local.xml.

#### To edit the local.xml file:

1 Using a text editor, edit local.xml.

The default location is:

C:\Program Files\Peregrine\Common\Tomcat4\webapps\oaa\WEB-INF.

2 Add an XML entry for each Operator.

The tag has the format: <[operator name]password>

For example, for operators scmgr and scdefault, add the following inside the <settings> ... </settings> tags:

```
<scmgr>scmgr</scmgr>
<scmgrPassword>scmgr_password</scmgrPassword>
<scdefault>scdefault/scdefault>
<scdefaultPassword>scdefault_password</scdefaultPassword>
```

where scmgr\_password is the ServiceCenter password assigned to operator scmgr, and scdefault\_password is the ServiceCenter password assigned to operator scdefault.

**Important:** The password must match the Operator password in ServiceCenter.

**3** Restart your application server for your changes to take effect.

# Creating an alternate login page

If you do not want to use the default Peregrine OAA login page, you can create your own login page that authenticates users and redirects them to the proper start page. Creating an alternate login page requires two basic steps:

- **Step 1** Create a login Web page with the necessary authentication parameters. See the following section, Creating a login Web page.
- **Step 2** Edit the local.xml file to specify the HTTP authentication method you want to use. See Specifying an alternate authentication method on page 211.

## Creating a login Web page

Your custom login web page can be any HTML form that prompts for the following required parameters:

- Username
- Password

In addition, you can include optional login parameters such as:

Display Language and Locale

- Time format
- Theme

A sample HTML login form, login\_sample.htm is in the OAA deployment folder of your application server:

<application server>\WEB-INF\oaa\

Customize this sample HTML form using the following guidelines:

- Whatever custom login file you create becomes part of your login URL. For example, if you create a custom page called my\_login.htm, then the login URL is http://<server>:<port>/oaa/my\_login.htm
- You must specify the basicauth servlet in the form action. For example, action="http://<server>:<port>/oaa/servlet/basicauth"
- Users who fail to be successfully authenticated should see the page that is specified in the \_failURL value. This can simply point to your login page so that the user can re-attempt login.
- The basicauth servlet does not encrypt usernames and passwords during login. You must enable HTTPS if you are concerned about password security on your intranet.
- There are no specific Administration page settings needed to set up a custom login page. You must define all login parameters in your custom login page.
- The following login parameters are available:

Login	parameters	Description
-------	------------	-------------

loginuser	This is a required login parameter specifying the user name. You must specify a form input for this parameter.	
loginpass	This is a required login parameter specifying the login password. You must specify a form input for this parameter.	
_locale	This is an optional login parameter specifying the user's locale and regional display settings.	
_timezone	This is an optional login parameter specifying the user's timezone.	
_theme	This is an optional login parameter specifying which theme should be displayed in the Peregrine OAA Portal	

## Specifying an alternate authentication method

By default, Peregrine OAA uses HTTP basic authentication provided by the HttpBasicAuthenticationManager class. If you create a custom login page, you need to specify the alternate authentication method in the local.xml file.

#### To specify an alternate HTTP authentication method:

- 1 Stop your application server.
- 2 Using a text editor, open the local.xml file located at:

```
<application server>\webapps\oaa\WEB-INF\
```

**3** Add the following entry to local.xml below the <settings> element (if the entry does not already exist):

```
<HTTPAuthClass>HttpAlternateAuthenticationManager/HTTPAuthClass>
```

- 4 Save the file.
- 5 Modify the web.xml file.

You will need to enable the AuthController servlet to establish a proxy for HTTP basic authentication.

- a Using a text editor, open the web.xml file located at: <application server>\webapps\oaa\WEB-INF.
- **b** Add the following lines at the end of the last <servlet> definition:

```
<servlet>
  <servlet-name>AuthController</servlet-name>
 <display-name>AuthController</display-name>
  <description>A controller (decorator) servlet that can be used to enable
configurable auth protection of any resource.</description>
  <servlet-class>com.peregrine.oaa.archway.AuthControllerServlet
  </servlet-class>
  <le><load-on-startup>2</load-on-startup>
</servlet>
<servlet-mapping>
  <servlet-name>AuthController</servlet-name>
 <url-pattern>/servlet/basicauth/*</url-pattern>
</servlet-mapping>
<servlet-mapping>
  <servlet-name>AuthController</servlet-name>
  <url-pattern>/servlet/auth/*</url-pattern>
</servlet-mapping>
```

c Save the file.

**6** Restart your application server.

Warning: Changing the HTTP authentication setting to the Alternate Authentication Manager exposes queries (including login names and passwords) in the URL. If you want to protect URL queries, then you must restrict access to this information through your Web server.

# **Q** Customizing Get-Answers

CHAPTER

This chapter discusses how to customize some of the features of Get-Answers. You can modify the stop word list, modify the search engine dictionaries, customize the text editor (edit-on Pro), and customize the

#### Topics in this chapter include:

- Understanding the search engine Stop Words list on page 214
- *Using search engine dictionaries* on page 217
- Setting up custom dictionaries on page 219
- Customizing edit-on Pro on page 226

spelling checker used with the editor.

- Customizing the edit-on Pro spelling checker on page 233
- Special character translation for ServiceCenter and Get-Answers integration on page 241

# **Understanding the search engine Stop Words list**

Stop words are function words in the English language, such as *a*, *the* and *and*. Get-Answers contains a standard Stop Words file (rw\_english.slx) that includes a list of these words.

**Note:** You can see the Get-Answers Stop Words list. To do so, open the file rw\_english.slx in a text editor such as Notepad.

This section explains the following:

- The exceptions to the Stop Words list. (See *Stop Words list exceptions* on page 214.)
- How words you add or remove from the Stop Words list affect searching in Get-Answers. (See *New and deleted Stop words* on page 215.)
- How to add or remove Stop words from the Stop Words list. (See *Modifying the Stop Words list* on page 216.)

## **Stop Words list exceptions**

Get-Answers uses the Stop Words file to identify and remove common words from indexes and user queries. This means that Get-Answers won't look for these common words when searching documents for content matches.

Stop words are removed from indexes and queries with the following exceptions:

- During query processing for an Advanced Search, if the query type is Boolean, the words AND, OR, NOT, and BUT are not removed (since they are recognized as Boolean operators).
- Stop words are skipped during indexing only if the word in the input file is exactly the same word in the stop words file. (For example, if "in" is in the stop words file, "INS" is still indexed).

- Stop words in a particular database field are not removed if the NO\_STOP\_WORDS flag is set in the configuration file (rware.cfg) for that field. For example, the NO\_STOP\_WORDS flag is set for the file name and the file extension fields, so that a file named 'begin.out' would not be reduced to a single period if the Stop words 'begin' and 'out' were removed.
- Stop words contained within idioms (for example, "by" and "all" within "by all odds" or the idiom "to be") are not removed as long as the idiom exists in the dictionary. If an idiom with Stop words is indexed, an indicator for the idiom is indexed, not the individual words contained in the idiom. This makes idioms independent of the Stop words file. You can, however, set up entire idioms in the Stop words file (stop idioms) for any idioms contained in an indexing dictionary. This removes the idiom from the indexing and query processes.

## New and deleted Stop words

When you add a Stop word to the Stop Words list, Get-Answers does not use the Stop word for searching. When you delete Stop words from the Stop Words list, Get-Answers does use the Stop word in searching.

This section explains how Get-Answers treats words that you add or remove from the Stop Words list.

When you add Stop words, keep the following in mind:

- These Stop words are not removed from the existing indexes. However, they are removed from any queries, so their presence in the indexes does not influence searching.
- Stop words you add are removed from all queries the next time the query program is started.
- New Stop words are not included in any future document indexes you create.

When you remove stop words from the Stop Words file, keep the following in mind:

■ These Stop words are not automatically added back into the document indexes, and queries on existing documents won't find those words. To add former stop words back into existing document indexes, you must delete the index files and then re-index the library. (See *To delete the index files and re-index the library*: on page 216)

- Queries on deleted stop words do not retrieve any documents indexed prior to the change. (A query using the removed stop words would not retrieve anything because the indexes for existing documents are still missing those words.)
- Stop words you have deleted from the Stop Words list are included in any future document indexes you create.

#### To delete the index files and re-index the library:

1 Go to Start > Programs > Get-Answers Search Engine > System Utilities Menu.

```
Choose a menu option:

1. [ Exit this program ]

2. Choose a working directory
Currently working with: C:\getanswers\Peregrine

3. Administration Servers - Start/Stop/Restart/Status

4. Search and Indexing Servers - Start/Stop/Restart/Status

5. Log Files and Temporary Files - Display or delete them

6. Indexing and index utilities

7. Query Program - Standalone (SQuery)

8. Query Program - Client/Server (CLSQry)

9. RDBMS scripts and utilities

10. Profiling utilities

11. System and server tests

12. System recovery utilities [Use BEFORE restarting servers]

13. Licensing checks

14. GetAnswers Search Engine Internet Spider utilities
```

- 2 Choose option 6 Indexing and Index Utilities.
- **3** Choose option 4 Index RDBMS Records.
- 4 Choose option 3 Index all RDBMS Records in your library.
- 5 Enter KMLib. This is the knowledge management library you want to index.
- **6** Enter 1 Yes to update the index.
- **7** Choose option 1 Return to previous menu.
- **8** Choose option 1 Return to previous menu.
- **9** Choose option 1 Exit this program.

## **Modifying the Stop Words list**

Before you make changes to the Stop Words file, read the following syntax rules.

- One stop word is allowed per line.
- Stop words must appear in all uppercase letters.

- The stop words require no specific order.
- "Stop idioms" are allowed, as long as the idiom exists in an indexing dictionary. Words in the idiom must be separated by a single space. (Multiple spaces or tabs are not allowed).
- Stop words must be spelled exactly as they appear in the text because they are not removed from the processing pipeline until after morphological analysis has taken place. For example, if "begin" is a stop word, you might also want to include "beginning," "began," and "begins."
- Blank lines in the file are allowed.
- Leading spaces are not allowed. Trailing spaces are automatically removed.

Important: Consider saving a copy of the original Stop Words file before you change it. The rw\_english.slx file is a standard ASCII text file. You can edit it using any word processing program or ASCII text editor.

#### To modify the stop words list:

- 1 Open the rw\_english.slx file in a text editor. The file is located in the \getanswers\resource\rw\_english directory.
- **2** Make the desired additions or deletions to the file using the guidelines mentioned above.
- **3** Save the file.

# Using search engine dictionaries

Get-Answers uses the dictionary during both indexing and queries. The dictionary enables Get-Answers to perform "concept" searching, which means that it automatically finds words related to query terms.

Get-Answers provides a baseline English dictionary. This section describes how to create a custom dictionary of your own to use along with the English dictionary for indexing and/or querying.

The baseline English dictionary was compiled from the following electronic sources:

- American Heritage® Dictionary of the English language, Third Edition
   © Copyright 1992 by Houghton Mifflin Company
- Enhanced Roget's US Electronic Thesaurus
   © Copyright 1995 by Inso Corporation
- Enhanced Roget's UK Electronic Thesaurus
   © Copyright 1995 by Inso Corporation
- WordNet 1.5© Copyright 1991, 1993, 1995 by Princeton University

A Get-Answers "dictionary" consists of the five files listed below, contained in a single directory:

- semantic.db Semantic database of meanings and the words related to each one
- irreg.db Lists of related words with irregular morphology or alternate spellings
- semantic.xrf Concept cross-reference network of the semantic.db file
- irreg.xrf Concept cross-reference network of the irreg.db file
- expand.wgt Weights for words expanded via the semantic database

Each dictionary's files are totally independent from those of any other dictionary.

# Updating indexes for search engine dictionary changes

If you edit a dictionary that you used for indexing, Peregrine recommends that you re-index the affected libraries. If you don't re-index, morphological variants of any new query terms are not found, and new idioms are ranked lower than they should be ranked.

To delete the indexes and re-index an entire library, see *To delete the index files and re-index the library:* on page 216.

# Setting up custom dictionaries

This section explains how to setup a user-defined dictionary for Get-Answers. A user-defined or custom dictionary is also called a search engine thesaurus. To setup a custom dictionary, you need to perform the following tasks.

- **Step 1** Familiarize yourself with the following two files **expand.wgt** and semantic.db.
- **Step 2** Set up the user dictionary folders.
- Step 3 Modify expand.wgt.
- **Step 4** Modify semantic.db.
- **Step 5** Set up the search engine to accept a query with idioms.
- **Step 6** Create cross references and indexes for the new user dictionary.
- **Step 7** Re-start the Get-Answers search engine and test it.

# expand.wgt and semantic.db

When you begin setting up a custom dictionary, you should familiarize yourself with the files expand.wgt and semantic.db. The file semantic.db holds all of the word associations. The file expand.wgt holds the association rules for matching the words within semantic.db.

# Setting up the user dictionary folders

You need to create a new blank user dictionary in order to create space for your custom dictionary.

#### To create a new blank user dictionary:

- 1 1. Locate the rw\_english folder. By default this is located at C:\getanswers\resource\rw english.
- **2** Create a subfolder for your user dictionary. Give the folder a custom name such as "userdict" with eight characters or less and without spaces.

- 3 Create the following empty text files within this folder. The easiest way to do this in Windows is to right-mouse click in your new user dictionary folder and select New > Text Document.
  - a Create a text file named irreg.db.
  - **b** Create a text file named semantic.db.
- 4 Copy the file expand.wgt from the standard dictionary folder into your new user dictionary folder. By default this is located at C:\getanswers\resource\rw\_english\dict\expand.wgt.

#### To setup preferences to locate your new user dictionary:

- Open the file lang.cfg in a text editor. By default this is located at C:\getanswers\resource\rw\_english\lang.cfg.
- 2 Locate the line: DICTIONARY = ".\dict":
- **3** Add the following line directly after the line (DICTIONARY = ".\dict";) DICTIONARY = ".\userdict";
- 4 Save and close the file lang.cfg.

# Modifying expand.wgt

You need to modify the file **expand.wgt** to setup the rules for creating an exact match between two or more group's terms.

#### To modify expand.wgt:

- 1 Open the file ...\userdict\expand.wgt in a text editor.
  This shows a list of numbers and their search ranking rules.
- 2 Locate the last line in the file.

  It should be something like this: 27 0.18; wn verb participle.
- 3 Create a new line after the last line that looks like this: 28 1.00; force exact match

The 28 is a new number we use to associate related terms

The 1.00 is the highest value we can use, and it associates terms as an exact match.

";force exact match" is a comment.

4 In the first few lines of the expand.wgt file are the lines:

;the next line has the types which are index entry points to semantic.db

3 4 7 10

Add 28 to the end of the series of numbers so that the line becomes:

3 4 7 10 28

5 Save and close the file expand.wgt.

# Modifying semantic.db

You need to modify semantic.db with a list of grouped terms that you want associated with one another. For this example all words you associate are considered exact matches. Searching for any word in the group will find all other words in the group. The exception to this are idioms (multi-word terms). It is OK to use idioms, but the changes used in this document will only associate the terms in one direction: single-word finds idiom, *not* idiom finds single-word. Idioms can exist in source documents, but it doesn't help to search with them.

#### To modify semantic.db:

- 1 Open the file ...\userdict\semantic.db in a text editor.
- 2 Add your list of grouped terms to this document using the following guidelines:
  - a Your groups will contain a root term followed by all other related terms.
  - **b** Format your groups with the following syntax:
    - First Line: A period (.)
    - Second Line: The "at" symbol (@), followed by a single upper-case character denoting the part of speech (e.g., N).
    - Third line: The number 28 (denoting the root term), followed by a space, followed by the Root term in all upper-case. Any term greater than three words will not work. Limit your terms to one to three words.
    - Following lines: The number 28 (or as denoted set up in the previous for an "exact match"), followed by a space, followed by the associated term or idiom in all upper-case. Any term greater than three words will not work. Limit your terms to one to three words.
    - Last line/First Line of next group: A period(.)

For example:

@N

- 28 RETRIEVER
- 28 MYDOGSPOT
- **28 SPOT**
- 28 GOLDEN
- 28 DOG
- 28 GOLDEN RETRIEVER
- 28 MY DOG SPOT

•

- @N
- 28 PERSIAN
- 28 MYARISTOCAT
- 28 ARISTOCAT
- 28 EXPENSIVE
- **28 CAT**
- 28 EXPENSIVE CAT
- 28 MY ARISTOCAT

.

3 Save and close the file semantic.db

# Setting up the search engine

This section explains how to setup the search engine to accept a query with idioms (multi-word terms). Idioms are multi-word terms such as MY DOG SPOT or GOLDEN RETRIEVER, where you want the entire phrase to be treated as a single word. By default you can have idioms in your documents and find them, but you will not be able search using an idiom and find other related terms.

For example, using the sample terms above a search for MYDOGSPOT finds the idioms "GOLDEN RETRIEVER" and "MY DOG SPOT" if they exist in your source documents, but you cannot search for "MY DOG SPOT" and find MYDOGSPOT.

#### To search with idioms in your query string:

- 1 Backup ALL files and subfolders of the rw\_english folder before performing this procedure.
  - By default these files are located at c:\getanswers\resource\rw\_english.
- 2 Now that you've made a backup, open the file rw\_english.ilx in a text editor.
  By default this file is located at
  C:\getanswers4\resource\rw\_english\rw\_english.ilx.
- 3 Insert each idiom into this alphabetical list in its exact alphabetized location using the following syntax:

IDIOM TERM in all caps, followed by a colon (:) followed by the letter denoting the part of speech, such as N.

#### **Examples:**

GOLDEN RETRIEVER:N MY DOG SPOT:N

**Warning:** Failure to put ALL idioms in EXACT alphabetized order causes the search engine to fail with errors upon starting. If this happens you will see an error about the terms not being in alphabetical order. Fix the order and try again.

- 4 Save the file.
- **5** Re-index the main Get-Answers dictionary (not your user dictionary) using the following command:

C:\getanswers\bin>dict\_xrf.exe
c:\getanswers\resource\rw\_english\dict

**Note:** This is not the user dictionary "userdict." This is the dictionary "dict" that ships with Get-Answers.

**6** Restart the search engine.

**Warning:** Back up the file rw\_english.ilx after making changes. This file may be removed or overwritten if you re-install or upgrade Get-Answers.

You should now be able to search with an idiom and find all other related terms. For example a search for MY DOG SPOT finds MYDOGSPOT.

# **Creating cross references and indexes**

You can now create cross references and indexes for the new user dictionary.

#### To create cross references and indexes:

- 1 Open a DOS command prompt.
- **2** Change directory to the Get-Answers "bin" directory.

By default this is at c:\getanswers\bin.

3 At the command prompt, run the following command to index the dictionary located, for this example located at c:\getanswers\resource\rw english\userdict:

C:\getanswers\bin>dict\_xrf.exe

c:\getanswers\resource\rw english\userdict

4 Press Y then ENTER at the following prompt:

This utility creates cross-references for the following files:

semantic.db and irreg.db.

Continuing deletes the files **semantic.xrf** and **irreg.xrf** in the following directory (a dot means current directory):

c:\getanswers\resource\rw\_english\userdict

The files morph.lex and idiom.lex in the same directory are also deleted.

Do you wish to continue? [press Y then ENTER to continue]

5 You should get the following confirmation:

Processing.....

Finished.

# Re-starting and testing the Get-Answers search engine

Because this is a query-only dictionary, you only need to restart the Search Engine Server when changes are made. If you are creating a new query+index dictionary then you need to re-index all your documents.

#### To restart the Search Engine Server:

- 1 Stop the Get-Answers Search Engine. To do this by default, select Start > Programs > Get-AnswersSearchEngine4.1 > Stop Search Engine Server.
- 2 Restart the Get-Answers Search Engine. To do this by default, select Start > Programs > Get-AnswersSearchEngine4.1 > Start Search Engine Server. The query engine will now engage the new query-only dictionary when performs a search.

#### To test the Get-Answers search engine:

- 1 Add a document with a term in one of your groupings, for example, GOLDEN.
- 2 Force the indexer to update so you don't have to wait. To do this, select Start > Programs > Get-AnswersSearchEngine4.1 > Index Updated Documents.
- **3** Search for a related term from your group, for example, SPOT. You should get a hit on your document.

# **Customizing edit-on Pro**

Get-Answers provides users with a text editor, edit-on Pro, for adding content and documents to the system. This section describes the administration and customization tasks for edit-on Pro.

# **Browser Settings**

In order to use edit-on Pro, your browser must be setup to support Java. The standard settings for most browsers are okay for edit-on Pro. The following is a guide for setting up the edit-on Pro recommended settings.

#### To set up Microsoft Internet Explorer with Microsoft Java VM:

1 Click Tools > Internet Options...

The Internet Options window opens.

2 Click the Security tab. The security level for the content zone from where you load edit-on Pro must at least be set to *Medium* (default setting for Internet zone).

**Note:** edit-on Pro will not work in *High* security level.

- **3** If you have to use **Custom Level...** settings, ensure in the Security Settings window that *Microsoft VM Java Permissions* is not set to *Disabled Java*. The default setting for *Medium Level* security is *High* safety for *Java Permissions*. edit-on Pro runs with this setting.
- **4** Also, in the Security Settings window check in the *Scripting* section that *Scripting of Java Applets* is enabled.

#### To set up Netscape Navigator 6.x, 7.x and Mozilla 1.x with Sun JRE 1.4.1:

- 1 Click Edit > Preferences...
  - The Preferences window opens.
- 2 On the Category menu in the Preferences window, click Advanced.
- **3** In the Advanced section ensure that *Enable Java* and *Enable JavaScript for Navigator* are checked.

# Java security considerations

Java applets run in a sandbox mode. By default, applets have no access to system resources outside the directory/environment from which they were launched; however, a signed applet can access local system resources, as allowed by the local system's security policy. The Java Development Kit 1.2 provides security tools so that end users and system administrators can sign applets and applications. Thus, they may define their local security policy, by specifying in a policy file how much access to local system resources a signed applet or application can have.

#### Running edit-on Pro as a signed applet

The edit-on Pro applet archive has been signed with a Thawte digital certificate (a Verisign company), to bypass the Java applet sandbox. Signing an applet archive guarantees that the applet is from the certificate owner (RealObjects in this case), and that the archive is the original and has not been tampered with. A signed applet will have access to system resources, which enables Cut and Paste feature to the system clipboard. To run a signed edit-on Pro applet:

- 1 Run edit-on Pro using the signed applet archive (edit-on-pro-signed.cab / edit-on-pro-signed.jar).
- 2 A "Security Warning" notification dialog box in Microsoft Internet Explorer or "Java Security" dialog box in Netscape Navigator 4.7 or Netscape Navigator 6.x appears.
- 3 In:
  - Microsoft Internet Explorer 5.0:
    - To continue loading the edit-on Pro signed applet, click "Yes". To abort loading, click "No". The "Always trust content from RealObjects GmbH" option, should be checked if you want your browser to insert RealObjects in as a trusted publisher, therefore preventing it from displaying this dialog box again.
  - Netscape Navigator 4.7:
    - To continue loading the edit-on Pro signed applet, click "Grant". To abort loading, click "Deny". The "Remember this decision" option, should be checked if you want your browser to put RealObjects in as a granted vendor, therefore preventing it from displaying this dialog box again.
  - In Netscape Navigator 6.x:

To continue loading the edit-on Pro signed applet, click "Grant this session". To abort loading, click "Deny". The "Grant always" button, should be clicked if you want your browser to put RealObjects in as a granted vendor, thus preventing it from displaying this dialog box again.

# Removing RealObjects from trusted publisher in Microsoft Internet Explorer 5.0

If RealObjects is registered as a trusted publisher for your browser, the "Security Warning" notification dialog box will not appear to warn you for the edit-on Pro signed applet.

# To remove RealObjects from your browser's list of trusted publishers and display this dialog box again:

- 1 In the browser, click Tools > Internet Options ...
- 2 In the Internet Options dialog click the Content tab.
- 3 Click the **Publishers...** button in the Certificates frame to list the trusted publishers in your browser.
- **4** In the Authenticode<sup>™</sup> Security Technology dialog box, select RealObjects GmbH from the Trusted Publisher list.
- 5 Click **Remove** to remove it from the trusted publisher list for your browser. The Security Warning notification dialog box should appear every time you load edit-on Pro signed applet until you again register RealObjects as trusted publisher.

#### Removing RealObjects from Granted Vendors in Netscape Navigator 4.x:

- 1 In the browser window, click Communicator > Security Info.
- 2 In the Security Info dialog, select Java/JavaScript.
- 3 Select RealObjects GmbH from the list of vendors that are granted access.
- 4 Click Remove.

The Java Security notification dialog box should appear every time you load the edit-on Pro signed applet, until you add RealObjects to the trusted publishers again.

#### Removing RealObjects from Granted Vendors in Netscape Navigator 6.1:

- 1 In Netscape Navigator 6.1, Granted Vendors can be removed using the Java Plug In 1.3.1 Control Panel in Control Panel.
- 2 Click the Certificates tab.

- 3 Select "RealObjects GmbH" from the list of granted vendors.
- 4 Click Remove.

The Java Security notification dialog box should appear every time you load the edit-on Pro signed applet, until you add RealObjects to the trusted publishers again.

# Style sheets support

This section describes how to set up and use the Style Properties dialog and Style Sheet Class Selector Choice menu available with edit-on Pro.

#### **Style Properties dialog**

You can use the Style Properties dialog to edit the style sheet. To display the icon which allows access to the style properties dialog in the toolbar, the appropriate definitions must be put in the toolbar.xml file. The following ins an example of a corresponding fragment of the toobar.xml file.

```
<toolbar>
...
<icon paramname="PROPERTIESDIALOG">/>
</toolbar>
```

The Style Properties dialog provides an interface that allows the user to create, change, and delete styles. The styles listed in the Style Properties dialog are the editable styles.

#### Adding new styles

The styles can be added using two types of selectors:

HTML tags

To add a new style to the document using the HTML tags selector:

1 Select the HTML Tags selector from the HTML Tags choice menu.

As you select the HTML tag, the name (selector) text field displays the corresponding selector. The new style will have the corresponding HTML tag as its selector, and it will be listed in the list on the left side of the dialog.

2 Click New.

example:

If you select *strong* form the HTML Tags Choice menu and click New, the new style will have *strong* as its selector.

**Note:** *Strong* defines a new style that can only be applied to the *strong* HTML Tag.

■ Name (Selector)

To add a new style to the document using the name selector:

- 1 Type the selector in Name (Selector)
- 2 Click New.

When something is typed in Name (Selector), the HTML Tag choice menu is emptied. The new style has the corresponding name selector and is listed on the left side of the dialog.

To create a new style, you should specify the properties of the style you want to create. For more information on how to create properties of the style, see *Modifying styles* on page 230.

#### example:

If you type \*.class1 from the HTML Tags choice menu, the new style will have \*.class1 as its selector.

\*.class1 defines a new style that can be applied to any HTML tag that has the class=class1 attribute.

**Note:** Adding a new style will not take effect if none of the style properties are specified. You should specify at least one property for the new style to take effect.

#### Modifying styles

Styles can be modified by altering thier properties. The style properties dialog allows for the following types of style modifications:

Style properties

Style properties allow the user to modify simple properties of the style. These include:

- font type
- font size
- bold
- italic

- underline
- font color
- background color
- Advanced style properties

Advanced style properties are properties not present in the style selector. The variation of properties which can be modified is virtually limitless, but edit-on Pro supports only a fragment of the available style sheet definitions. You can add name-value pair attributes using the Add button in the Advanced Style Properties. You can also modify and remove existing advanced style properties.

#### To add name-value pairs:

1 Click Add in the Advanced Style Properties window.

A dialog opens which requests the name-value pair of the style's attribute.

- **2** Type the name-value pair in the text field.
- 3 Click OK.

The name-value pair is inserted into the Advanced Styles Properties list.

#### To modify an existing advanced style property:

- 1 Select the style from the style properties list
- 2 Click Modify.

A dialog opens that allows you to make the appropriate modifications.

3 Click OK.

The modified name-value pair is inserted into the Advanced Styles Properties list.

#### To remove an existing advanced style property:

- 1 Select the style from the style properties list
- 2 Click Remove.

#### Changing a style's name

You can use the Properties window to change a style's name.

### To change a style's name:

1 Select the style from the list of styles.

- 2 Type the new name in Name (Selector) or select an item form HTML Tags choice menu.
- 3 Click Change Name.

#### Deleting a style

You can use the Properties window to delete a style.

#### To delete a style:

- 1 Select the style from the list of styles.
- 2 Click Delete.

#### Style sheet class selector choice menu

The style sheet can be applied of the HTML tag in the current cursor position using the Style Sheet Class Selector choice menu. To display the menu on the toolbar, the appropriate definitions must be put in the toolbar.xml file. The following is an example of a fragment of the toolbar.xml file.

```
<toolbar>
...
<choice paramname="STYLESHEET"/>
...
</toolbar>
```

The STYLESHEET parameter allows the user to select stylesheet classes, which can then be applied into a selection of text using a drop-down list box. This feature is disabled when there is no selection. The Style Sheet Class Selector Choice Menu is context sensitive, meaning that the classes listed in the choice menu will change in relation to the HTML tags in the cursor position.

#### **Insert span**

The style sheet can be applied to the HTML tag in the current cursor position, when there is a selection using the 'Insert Span' button. To display the insert span icon in the toolbar, the appropriate definitions must be put in the toolbar.xml file. Following is an example of a fragment of the toolbar.xml file.

```
<toolbar>
...
<icon paramname="INSERTSPAN"/>
```

</toolbar>

The INSERTSPAN parameter creates an icon that when clicked asks for the stylesheet class to apply to the span. The available classes are generic and span context classes. After pressing OK, a span tag pair is inserted. The user may use this feature, to insert a span tag around a selection of text, and to apply a style sheet class into that tag. Please note that the classes listed in the class choice menu of the Insert Span dialog are the styles which have generic selectors (e.g., \*.class1) and/or the styles that have span selectors (e.g., span.class1).

# Displaying unknown tags

Unknown tags will be preserved and displayed as yellow marks within the WYSIWYG View, if the toolbar button is activated. An "unknown tag property" dialog opens when clicking the right mouse button on the yellow marks. The contents of the unknown tag can be edited and changes are preserved.

# Online help in edit-on Pro

To make the online help accessible from the help button on the toolbar, please make sure that the following settings are done:

- The HELP API parameter is set to specify the URL of the help file in HTML format. The help will be displayed in a new browser window when the user clicks on the HELP icon.
- The HELP icon must be activated by setting the HELP parameter in the toolbar definition file.

The Online Help can be found in the "eophelp" subdirectory of the edit-on Pro main installation directory (usually "eopro"). It is available in US English, Spanish, French, and German.

# Customizing the edit-on Pro spelling checker

You can customize the spelling checker used in the edit-on Pro authoring tool.

#### To customize the spelling checker:

1 Add the spelling checker library to the HTML Applet tag:

2 Add the parameter SPELLCHECKPROPERTIES to the HTML Applet tag to specify the URL address of the spelling checker properties file relative to the applet code base. The spelling checker properties file defines which options to set and which dictionaries/lexicons to open. Change the parameter value to change the dictionary/lexicon.

```
<PARAM name="SPELLCHECKPROPERTIES" value="sc - americanenglish.txt">
```

- **3** Add the parameter SPELLCHECK in the button ordering file to make the spelling checker icon visible.
- **4** Copy the dictionary/lexicon files specified in the spelling checker properties file to the proper location on the web server.

# Spelling checker properties

A settings in the spelling checker properties file can be modified. The settings including keys and options.

#### MainLexicon and UserLexicon

The spelling checker opens main lexicons using keys named MainLexicon, where *n* is a number ranging from 1 to 99. The first main lexicon must be specified by MainLexicon1, and any other main lexicons must be numbered sequentially starting with MainLexicon2. The lexicon stops if the MainLexicon sequence numbers break.

UserLexicon and MainLexicon property settings have the following form:

```
{Main | User}Lexiconn=name [, access method] [, format]
```

n: Sequence number of the main or user lexicon, ranging from 1 to 99. Lexicons open in the specified sequence.

name: Name of the lexicon file, resource, or URL (depending on the access method).

access method: Method used to access the named lexicon:

- file: The lexicon is opened as a local disk file (default).
- resource: The lexicon is opened as a resource using java.lang.Class' getResourceAsStream method.
- url: The lexicon is opened as a URL using java.net.URL's openStream method.

format: The format of the lexicon. The format defaults to "t" unless the extension part of the name parameter is "clx" or "uclx," in which case the default format is "c." "t" represents a text lexicon. "c" represents a compressed lexicon.

The spelling checker accesses the lexicon files relative to the code base. The lexicon files can reside in the same directory as the applet or in a subdirectory.

Currently available MainLexicons include:

- American English MainLexicon
- British English MainLexicon
- Canadian English MainLexicon
- German MainLexicon
- French MainLexicon
- Spanish MainLexicon
- Finnish MainLexicon
- Dutch MainLexicon
- Swedish MainLexicon
- Italian MainLexicon
- Norwegian
- Danish
- Brazilian

- American Medical
- British Medical

A custom Lexicon can be created by making a new text lexicon file or by altering an old one. The text lexicon is a mere text file which can be edited using any text file editor (e.g.< Notepad). Custom words can be added by simply appending the word at the end of the word list, inside the text lexicon file. The "ADDSPELLCHECKWORDURL" tag in the configuration file can be used to specify the CGI/ASP/PHP/JSP URL, which appends the new word to the related text lexicon file.

#### Spelling checker options

You can make the option value "true" or "false." The option is set if the value is "true." The option's default value is used if the corresponding key is not included in the Properties.

The options affect the way the spelling checker operates. In most cases, options are enabled by setting their values to true and disabled by setting their values to false.

- ALLOW\_ACCENTED\_CAPS\_OPT: If set to true, capital letters containing accents are considered acceptable. If set to false, words containing accented capitals are considered misspelled. Setting this option to false degrades performance. Default: true.
- CASE\_SENSITIVE\_OPT: Set to true if words with different letter-case patterns should be treated as different words. Set to false if words containing different case patterns should be treated as identical. Setting this option to false degrades performance. Example: If set to true, treat *Canada* and *canada* as two different words; if set to false, treat *Canada* and *canada* as the same word. Default: true.
- IGNORE\_CAPPED\_WORD\_OPT: Set to true if words should be ignored (skipped) if they begin with an uppercase letter. Set to false if the words should be checked for spelling errors. Example: If set to true, ignore *Clarkson*; if set to false, check *Clarkson*. Default: false.
- IGNORE\_ALL\_CAPS\_WORD\_OPT: Set to true if words consisting entirely of uppercase letters should be ignored (skipped). Set to false if the words should be checked for spelling errors. Example: If set to true, ignore *ASAP*; if set to false, check *ASAP*. Default: false.

- IGNORE\_category\_NAMES\_OPT: Set to true if words that appear to be Internet category names should be ignored (skipped). Set to false if the words should be checked for spelling errors. Words are considered to be Internet category names if they contain at least one "dot" (.) and at least two alpha-numeric characters in a row. Example: If set to true, ignore wintertree-software.com; if set to false, check wintertree-software.com. Default: false.
- IGNORE\_MIXED\_CASE\_OPT: Set to true if words containing an unusual mixture of uppercase and lowercase letters should be ignored (skipped). Set to false if such words should be checked for spelling errors. Example: If set to true, ignore *PrintScreen*; if set to false, check *PrintScreen*. Default: false.
- IGNORE\_MIXED\_DIGITS\_OPT: Set to true if words containing a mixture of letters and digits should be ignored (skipped). Set to false if such words should be checked for spelling errors. Example: If set to true, ignore *Win95*; if set to false, check *Win95*. Default: false.
- IGNORE\_NON\_ALPHA\_WORD\_OPT: Set to true if words that contain no alphabetic characters should be ignored (skipped). Set to false if the words should be checked for spelling errors. Example: If set to true, ignore 12345; if set to false, check 12345. Default: true.
- REPORT\_UNCAPPED\_OPT: Set to true if uncapitalized words which exist in the lexicons in capitalized form only should be reported (via UNCAPPED\_WORD\_RSLT). Set to false if uncapitalized words should not be reported. Example: If set to true, report *canada*; if set to false, do not report *canada*. Default: true.
- REPORT\_MIXED\_CASE\_OPT: Set to true if words containing an unusual combination of upper and lowercase letters should be reported (via MIXED\_CASE\_WORD\_RSLT). Set to false if such words should not be reported. Example: If set to true, report *TUesday*; if set to false, do not report *TUesday*. Default: false.
- REPORT\_MIXED\_DIGITS\_OPT: Set to true if words containing a combination of letters and digits should be reported (via MIXED\_DIGITS\_WORD\_RSLT). Set to false if such words should not be reported. Example: If set to true, report *June5*; if set to false, do not report *June5*. Default: false.
- REPORT\_DOUBLED\_WORD\_OPT: Set to true if two occurrences of the same word in a row should be reported (via DOUBLED\_WORD\_RSLT). Set to false if doubled words should not be reported. Example: If set to true, report *the the*; if set to false; do not report *the the*. Default: false.

- SPLIT\_HYPENATED\_WORDS\_OPT: Set to true if hyphens ( ) should be treated as word separators, and each subword checked individually. This word splitting is done only if the hyphenated form of the word does not exist in any open lexicon. The word is considered correctly spelled if all subwords are correctly spelled. Set to false if hyphenated words should be checked in their entirety. Example: If set to true, and *bright-blue* was not found in the open lexicons, check both *bright* and *blue* and treat *bright-blue* as correctly spelled if both words are found; if set to false, report *bright-blue* as misspelled if not found in the open lexicons. Default: true.
- SPLIT\_CONTRACTED\_WORDS\_OPT: Set to true if apostrophes should be treated as word separators, and each subword checked individually. This word splitting is done only if the contracted form of the word does not exist in any open lexicon. The word is correctly spelled if all subwords are correctly spelled. Default: false.
- SPLIT\_WORDS\_OPT: Set to true if words should be treated as a series of concatenated subwords, and each subword checked individually. This word splitting is done only if the original word is not found in any open lexicon. The word is correctly spelled if all subwords containing two or more characters are correctly spelled. Default: false.
- STRIP\_POSSESSIVES\_OPT: Set to true if possessives of the form 's and s' should be removed from words before checking their spelling. The main lexicons included with the Sentry SDKs contain no possessive word forms, so this option should be enabled when using these lexicons. Set to false if words should be checked with their possessives intact. Default: true.
- SUGGEST\_SPLIT\_WORDS\_OPT: Set to true if the suggest method should attempt to split words into two valid subwords. Set to false if split words should not be suggested. Example: If set to true, suggest *the boy* as a replacement for *theboy*; if set to false, do not suggest *the boy*. Default: false.

#### **Example properties file**

The following list shows the default settings for American English. This file is the sc-americanenglish.txt file in the eopro folder of the base server path to oaa.

#Settings for American English dictionary
UserLexicon1=lex/userdic.tlx,url,t
UserLexicon2=lex/correct.tlx,url,t
UserLexicon3=lex/accent.tlx,url,t

```
MainLexicon1=lex/ssceam.tlx,url,t
MainLexicon2=lex/ssceam2.clx,url,c
REPORT UNCAPPED OPT=true
IGNORE CAPPED WORD OPT=false
SPLIT WORDS OPT=false
IGNORE_NON_ALPHA_WORD_OPT=true
REPORT MIXED CASE OPT=false
REPORT DOUBLED WORD OPT=true
IGNORE_ALL_CAPS_WORD_OPT=false
ALLOW ACCENTED CAPS OPT=true
MinSuggestDepth=50
SPLIT HYPHENATED WORDS OPT=true
Suggestions=typographical
IGNORE MIXED CASE OPT=false
STRIP POSSESSIVES OPT=true
REPORT MIXED DIGITS OPT=false
SUGGEST_SPLIT_WORDS_OPT=true
IGNORE DOMAIN NAMES OPT=true
IGNORE MIXED DIGITS OPT=false
SPLIT CONTRACTED WORDS OPT=false
Comparator=Typographical
CASE SENSITIVE OPT=true
```

# Adding words to the spelling checker

You can configure edit-on Pro so that users can add words to the spelling checker.

#### To activate the Add Word to spelling checkerfeature in edit-on Pro:

1 Set the ADDSPELLCHECKWORDURL parameter in the configuration file. Example:

```
<spellingcheckers>
  <addspellcheckwordurl url="http://www.yourdomain.com/eopro/AddWord.jsp"
  />
</spellingcheckers>
```

2 Set the url attribute to the URL address where the Server-side script (CGI/ASP/PHP/JSP file) is available.

The CGI/ASP/PHP/JSP script is responsible for appending the new word to the corresponding text lexicon file.

The following listing shows a sample of a JSP script that adds words to the corresponding lexicon file:

```
<%@ page import="java.io.*" %>
<html>
<head>
<title>Add Word</title>
</head>
<body>
<%
   String language = request.getParameter("LANG");
   String strFile = "D:\\dictionary-directory\\";
   if (language.equalsIgnoreCase("US English"))
      strFile = strFile + "userdicam.tlx";
   else if (language.equalsIgnoreCase("German"))
      strFile = strFile + "userdicge.tlx";
   File fileDict = new File (strFile);
   RandomAccessFile dict = new RandomAccessFile(fileDict, "rw");
   boolean line = true;
   String strAdded = " ";
   strAdded="\r\n"+request.getParameter("WORD");
   while (line){
      String s = dict.readLine();
      if (s == null){
           dict.writeBytes(strAdded);
           break:
      }
   dict.close();
  %>
</body>
</html>
```

**Note:** The Variable LANG contains the spell checker's active language, and the variable WORD contains the new word to add to the dictionary.

When the user presses the Add Word button in the Spelling Checker dialog:

• edit-on Pro passes the value of the variables LANG and WORD to the server-side script (CGI/ASP/PHP/JSP file) as a POST request.

- The server-side script adds the value of variable WORD into the lexicon file specified by the variable LANG.
- edit-on Pro loads the new lexicon file (dictionary) with the new word the next time the spelling checker action is invoked.

# Special character translation for ServiceCenter and Get-Answers integration

The table, EntityHash.txt, which is located in:

C:\Program Files\Peregrine\Common\Tomcat4\webapps\oaa\dde

enables bi-directional translation of special characters between the actual character and the html ISO entities for the character when integrating between ServiceCenter and Get-Answers. This table is not 100% inclusive as new characters may be added with changes to the ISO standard. If you have a special character that is not listed, you may add it to the list with the following format:

&ISO Entity Name; 'actual character' <cr>

Be sure to use a carriage return at the end of the line. You may use the format "\$#Hex;" for the ISO Entity Name but this method should be discouraged since not all browsers may be using the same character set and could render the wrong character during translation.

The EntityHash.txt file is loaded once when the Get-Answers SC DDE integration applet starts up. Any changes to EntityHash.txt may require browser restarts for all connected clients before the change take effect for them.

# 1 Get-Answers Workflows

Workflow is a tool you can use to route documents through the review process automatically. Workflow consists of business processes, which are objectives for your work. For example, reviewing a document is a business process. Business processes contain activities. Each activity forwards the goal of the business process. The activity "publish document" is the end result of the review process.

**Note:** Workflow is a tool that professional services customizes. The only way to customize the out-of-the-box Get-Answers workflows is to add an additional and identical Editor or Reviewer activity before the final Owner activity. It cannot be customized otherwise without professional services.

This chapter describes how to use workflow in general and includes the following topics:

- Defining workflow templates on page 244
- Using Workflow Administration on page 274
- *Using the Request List* on page 296

# **Defining workflow templates**

The workflow templates are process definitions for business processes associated with a business object, such as contracts or projects. Business objects can be attached to a specified workflow template designed for processing work for the business object.

The Glossary of this book includes definitions of workflow terms.

This section includes explanations for:

- Creating a workflow template on page 244
- *Creating a workflow template from another template* on page 267
- *Modifying a Workflow template* on page 267
- *Deleting a Workflow template* on page 269
- Creating a Component template on page 271

To create an workflow template:

- **Step 1** Identify a process type: standalone, business object, embedded data
- **Step 2** Create activities for the process workflow: task, approval, message, script, subprocess.
- **Step 3** Create Select activities for the process workflow: branches in the workflow.
- **Step 4** Create Jump activities for the process workflow.
- **Step 5** Add component templates to the process workflow.
- **Step 6** Modify an activity in the process workflow as required.

# Creating a workflow template

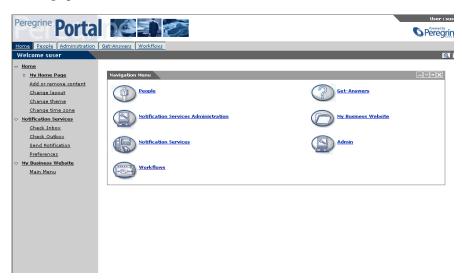
Workflow provides a graphical workflow designer for designing and creating workflow templates. After a workflow template is created and attached to a business process, process instances of the workflow template can be started.

Each process instance is routed according to the activities specified in the workflow template, but the workflow definition for a process instance is no longer linked to the workflow template. If changes to the routing are required during processing, the user can modify the workflow through the workflow designer for that specific process instance. The workflow template is not changed and future process instances are routed according to the workflow template.

**Note:** Capability (permission) must be assigned to a user before the user can modify a workflow route. Refer to the Chapter 4 for information about security and assigning capabilities.

#### To create a workflow template:

1 Log on to your Web application to display the Navigation Menu on your Home page.



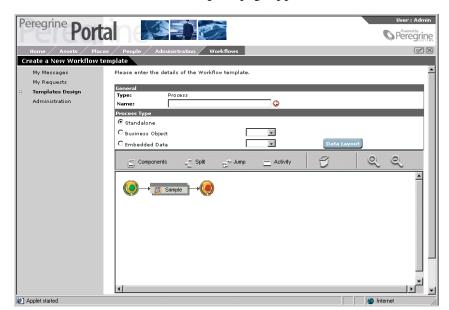
**2** Click the Workflows tab or click **Workflows** from the Navigation Menu. The Workflow link appears in the left pane.

**3** Click the **Templates Design** link to display the **List of Workflow templates** page.



**Note:** After workflow templates are defined, the template name and type (Process or Component), for each template appears in the list.

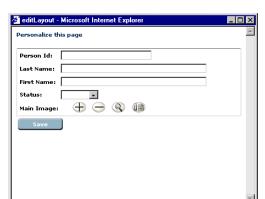
4 Click New Process.



The Create a New Workflow template page appears.

The Type of Process entry is created by the system based on your selection of the New Process button.

- 5 In the Name text box, type the name of the new workflow template.
- 6 In the Process Type section, select one of the option buttons to define the process type associated with this workflow template.
  - Standalone—When the Standalone option button is selected, there is no link to a business object or to data.
  - Business Object—When you select the Business Object option button, the workflow relates to a business object associated with your Web application.
  - Embedded Data—When you select the Embedded Data option button, the workflow relates to data. This data is not stored in the database, but is carried with the process.
- 7 If you selected the Business Object option button, select the business object from the associated drop-down list.
- **8** If you selected the **Embedded Data** option button:
  - a Select the entity or schema from the associated drop-down list.



**b** Click **Data Layout** to display the **EditLayout** window.

You can change the data layout using the **Personalize this page** option at the top of the page. Refer to your Web application documentation for information on the Personalization feature.

c Click Save to exit the EditLayout window and return to the Create a New Workflow page.

The workflow template defines a specific process definition. The name assigned to the template *must* be unique and should reflect the process definition.

Each workflow template must have a Start and End activity. When initially displayed, the workflow designer contains the Start and End activity, and includes a sample activity that can be modified for use in your workflow template or can be deleted. See *Modifying an activity* on page 265 and *Deleting an activity* on page 266.

**9** In the workflow designer, create and add activities to the workflow template using the toolbar icons described in the following table.

lcon	Description
Components	Select a component from the template list.
Components	See <i>To add a component template</i> : on page 264 for information on adding an activity from the template list.
← Split	Create a new Select activity.
C Spin	See <i>To create and add a Select activity:</i> on page 259 for information on adding a Select activity.

lcon	Description
Jump Jump	Create a new Jump activity.  See <i>To create and add a Jump activity:</i> on page 262 for information on adding a Jump activity.
Activity	Create a new activity.  See <i>To create and add a new activity:</i> on page 249 for information on adding a new activity.
8	Trash. See <i>To delete an activity</i> : on page 266 for information on deleting an activity from a workflow template.

In addition to the activity icons on the toolbar, zoom functionality is provided by the following toolbar icons.

lcon	Description	
0	To zoom in on the workflow template graphic, click the <b>Zoom in</b> icon until the required magnification is achieved.	
Q	To zoom out on the workflow template graphic, click the <b>Zoom out</b> icon.	

#### Creating a new activity

These activities represent the basic activities used when defining a workflow template for a specific process definition. An activity can be one of four types: Task, Approval, Message, or Script.

#### To create and add a new activity:

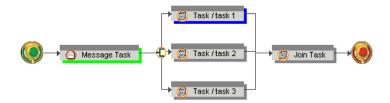


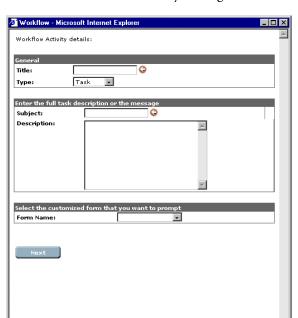
- 1 Position the cursor over the Activity icon, then click and hold down the left mouse button.
- 2 Drag the Activity icon over an activity so that the new activity precedes, follows, or is parallel to that activity.
  - Notice that a rectangle outlined in red appears along with the icon.
- **3** To select the placement of the new activity, position the red rectangle in one of the positions described in the following table and release the left mouse button.

**Note:** The position of the new activity is determined by where the red rectangle is located when you release the mouse button.

When positioned	The activity is placed	
over the first half of the current activity	before the current activity	
over the last half of the current activity	after the current activity	
over the top half of the current activity	above the current activity	
over the bottom half of the current activity	below the current activity	

Parallel routing is defined by creating activities above or below a current activity (AND-Split). The activities are then joined later in the process by adding an activity after the parallel activities (AND-Join).





After you click the mouse button, the Workflow window opens. You define the details for the new activity through this window.

- 4 In the Title text box, type the title you want to display on the activity in the workflow designer.
- 5 Select the task type from the **Type** drop-down list.

Values for Type are:

- Task—a manual task
- Approval—a task requesting approval
- Message—an informational message that does not require user work
- Script—a task performed by the system
- Subprocess—another workflow process to be part of this workflow
- **6** In the **Subject** text box, type a short description of the task.
  - This description appears in the Screen Tip when the cursor is placed over the activity.
- 7 In the Description box, type a full description of the task, or type the detailed message when the selected Type option button is Message.

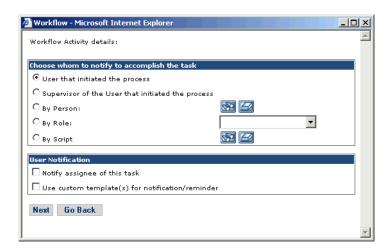
- 8 For business objects type workflows, if you want to a customized form to display, select the name of the form from the Form Name drop-down list. Instead of the standard Task Details page, the selected form appears when viewing task details.
- 9 Click Next.

The Workflow window displays additional activity details. The activity details are different depending on the **Type** option button selected. If the select type is:

- Task or Approval, see *To complete the activity details for Task or Approval tasks*: on page 252.
- Message, see To complete the activity details for a Message task: on page 255.
- Script, see *To complete the activity details for a Script task:* on page 257.

#### To complete the activity details for Task or Approval tasks:

When the activity type is Task or Approval, the Workflow window shown below opens.

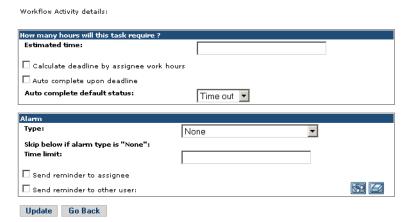


- 1 In the Choose whom to notify to accomplish the task section, select one of the option buttons to determine who is notified of the task.
  - User that initiated the process—The user who initiated the process is notified.
  - Supervisor of the User that initiated the process Supervisor of User as indicated in the People module.

- By Person—The specific person selected is notified.
- By Role—All users assigned to the selected role are notified.
- By Script— A script determines one or more users to be notified.
- **2** If you selected the **By Person** option button:
  - a Click the search icon to display the Employee Lookup window.
  - **b** In this window, select the person you want to notify. The name of the person selected appears next to the option button.
- 3 If you selected the By Role option button, select the role from the associated drop-down list.
- 4 If you want to notify the user by email, select the "Notify Assignee of this task" check box.

**Note:** The user is notified by email, which is the default method indicated in the options provided in Notification Services activity under the Home tab. Get-Answers has customized the Notification Services email messages so that users can review their workflow tasks and go directly to the details link in their emails. For more information refer to the Notification Services 4.1.2 Quick Start Guide. Each email notification contains standard message text and a direct link to the appropriate application.

- 5 If you do not want to use the standard template, select the Use custom template(s) for notification/reminder check box.
- 6 Click Next.



- 7 In the How many hours will this task require? section, you have the following options:
  - **a** When the task is time-sensitive, type the number of hours allocated for the task to be completed in the **Estimated time** text box.
  - **b** Select the Calculate deadline by assignee work hours check box if you want the deadline to be calculated according to the actual work schedule of the assignee as indicated in Notification Services. Doing so prevents the deadline from occurring on a day that the assignee normally has off.
  - c Select the Auto complete upon deadline check box to cause the activity to go to completed state when the deadline is reached. If you select this option, also choose a default status from the drop-down list in the Auto complete default status field.

**Important:** This step is valid only if this is **not** a Get-Answers activity. If this is a Get-Answers activity and you check **Auto complete upon deadline**, you will orphan the unpublished document and make it inaccessible in the Get-Answers GUI.

You can set an alarm for a time-sensitive task.

8 Select the alarm type from the **Type** drop-down list.

Values are:'

- None—an alarm is not defined for the task.
- Time elapsed since start of task—alarm sent when the elapsed time (specified in Time limit) from the start of the task is reached.
- Time before end of task—alarm sent when the number of hours (specified in Time limit) prior to the end of the task is reached.

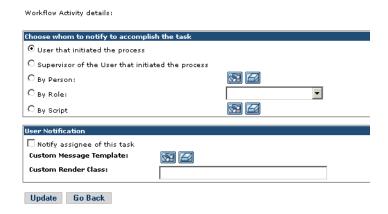
**Note:** When the alarm type is **Time before end of task**, the **Estimated time** text box must contain an entry for the number of hours allocated for the task.

- **9** Select the **Send reminder to assignee** check box to send the notification to the person assigned to the task.
- 10 Select the Send reminder to other user check box when you also want to send the e-mail notification to another person.
  - This person may be a supervisor or project manager who needs to know that a time-sensitive task is pending.
- 11 Click the search icon to display the Employee Lookup window.

- 12 Using the window, select the other user to notify.
- **13** Click **Update** to complete the task definition and display the activity in the workflow designer.

### To complete the activity details for a Message task:

When the activity type is Message, the Workflow window shown below opens.



- 1 In the Choose whom to notify to accomplish the task section, select one of the option buttons to determine who is notified of the task.
  - User that initiated the process—The user who initiated the process is notified.
  - Supervisor of the User that initiated the process Supervisor of User as indicated in the People module.
  - By Person—The specific person selected is notified.
  - By Role—All users assigned to the selected role is notified.
  - By Script— A script determines one or more users to be notified.
- 2 If you selected **By Person**, click the search icon to display the Employee Lookup window and select the person you want to notify
- 3 If you selected By Role, select the role from the associated drop-down list.
- 4 If you want to notify the user, select Notify assignee of this task.

**Note:** The user is notified by the options provided in Notification Services under the Home tab. For information on Notification Services, refer to the *Notification Services* documentation.

When a user receives a notification, it contains standard message text and a link to the application for the associated activity.

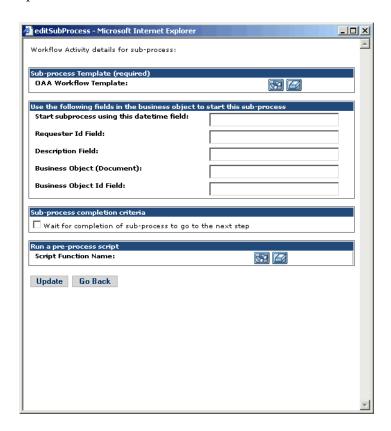
a If you have defined a custom template in Notification Services, click the binoculars icon next to Custom Message Template. A window opens, for you to select the template you want to use.

**Note:** Options a and b in this step should only be used by trained Professional Services personnel.

- **b** If you select a custom template that uses fields other than the default workflow fields, enter the name of the Java class used to render the custom template in the Custom Render Class field.
- 5 Click **Update** to complete the task definition and display the Message activity in the workflow designer.

### To complete the activity details for a Subprocess:

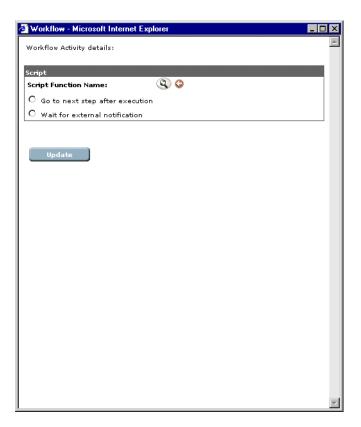
When the activity type is Subprocess, the Workflow window shown below opens.



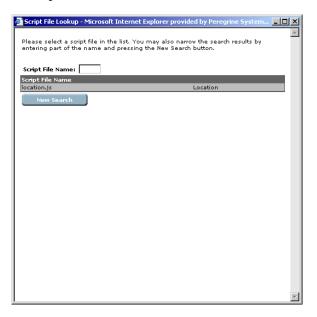
- 1 Use the drop-down list to select the **OAA Workflow Template** that is the subprocess.
- **2** If the subprocess relies a Business Object, populate the fields in the second section of the form.
- 3 If the subprocess requires a status of complete prior to going to the next step the process, select the Wait for completion of sub-process to go to the next step check box.
- **4** If a script should run before the subprocess starts, use the drop-down list to select a **Script Function Name**.

## To complete the activity details for a Script task:

When the activity type is Script, the Workflow window shown below opens.



1 Click the **binoculars** next to **Script Function Name** to display the Script File Lookup window.



- 2 Using this window and following the lookup instructions, locate and select the script function.
  - The selected script function name appears next to **Script Function Name** in the Workflow window.
- 3 Select one of the following option buttons to determine how the workflow process continues after the script is executes:
  - Go to next step after execution—Select this option button if you want the system to continue the workflow process after the script is executed.
  - Wait for external notification—Select this option button if you want the system to wait for an event from an external system before continuing the workflow process.
- 4 Click **Update** to complete the task definition and display the activity in the workflow designer.

## Creating a Select activity

A Select activity is used to branch workflow routing (OR-Split). The workflow route is determined by a decision made in the previous activity or, in the case of a Custom Select, by the value returned after a script executes.

Note: If a Select activity, where the selection type is Approval, is present in the workflow, an Approval type activity must directly precede the Select activity.

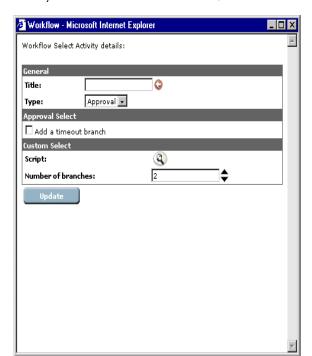
## To create and add a Select activity:



- 1 Position the cursor over the Split icon, then click and hold down the left mouse button.
- 2 Drag the Split icon over an activity so that the new activity precedes, follows, or is parallel to that activity.
  - Notice that a rectangle outlined in red appears along with the icon.
- 3 To select the placement of the Select activity, position the red rectangle in one of the positions described in the following table and release the left mouse button.

**Note:** The position of the activity is determined by where the red rectangle is located when you release the mouse button.

When positioned	The activity placed	
over the first half of the current activity	before the current activity	
over the last half of the current activity	after the current activity	
over the top half of the current activity	above the current activity	
over the bottom half of the current activity	below the current activity	



After you release the mouse button, the Workflow window opens.

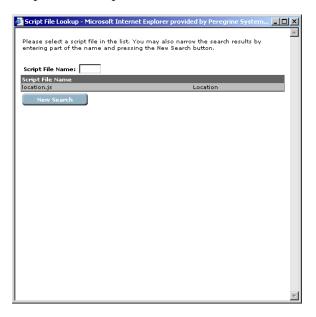
- **4** Type a name for the task in the **Title** text box.
  - The title appears (followed by the task number) on each of the activities associated with this activity.
- **5** Select the type of selection from the **Type** drop-down list.

### Values are:

- Approval—checks the previous activity to determine the routing requirements.
  - If you select this option and you have defined Time Out as the Auto Complete Default Status for the task, select **Add a time out branch** in the Approval Select section.
- Custom—determines the routing requirements from the value returned by a script.

If you selected Approval, go to step 8 to complete the procedure.

6 If you selected Custom, click the binoculars icon next to Script to display the Script File Lookup window.



- 7 Using this window and following the lookup instructions, locate and select the script function.
  - The selected script function name appears next to **Script** in the Workflow window.
- 8 Type or select the number of branches in the Number of branches text box.
- 9 Look at the task preceding this selection. If it meets all of the following criteria, you must select the Add a time-out branch checkbox.
  - Auto complete upon deadline is activated
  - Auto complete default status is Time Out.
- 10 Click Update to complete the Select activity definition and display the activity in the workflow designer.

A Select activity creates activities for each of the branches created.



The top activity (task 1) executes when the prior task is approved. The bottom activity (task 2) executes when the prior task is declined.

11 Click each of the branch activities and modify the activity details. See *Modifying an activity* on page 265 for information on modifying activity details.

## Creating a Jump activity

A Jump activity is used to re-route the process forward or backward to a specific activity. For example, when an approval is declined, the process may be sent back to another activity for changes or sent forward to the End activity.

## To create and add a Jump activity:



- 1 Position the cursor over the Jump icon, then click and hold down the left mouse button.
- 2 Drag the Jump icon over an activity so that the new activity precedes, follows, or parallels the activity.

Notice that a rectangle outlined in red appears along with the icon.

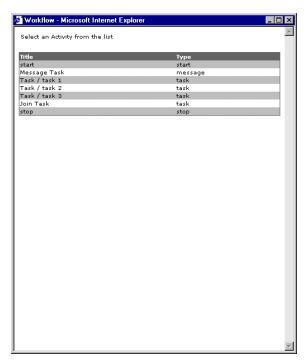
To select the placement of the Jump activity, position the red rectangle in one of the positions described in the following table and click the left mouse button

**Note:** The position of the activity is determined by where the red rectangle is located when you release the mouse button.

When positioned	The activity is placed	
over the first half of the current activity	before the current activity	
over the last half of the current activity	after the current activity	

When positioned	The activity is placed
over the top half of the current activity	above the current activity
over the bottom half of the current activity	below the current activity

After you release the mouse button, the Workflow window appears.



**3** From the activity list, select the destination activity for the jump.

The title of the destination activity appear in the Screen Tip when the cursor is placed over the jump activity.

The Workflow window closes and the Jump activity is added in the workflow designer.

# **Adding a Component Template**

Component templates are a set of activities that represent a portion of a process that can be used in more than one workflow template. See Creating a Component template on page 271.

When component templates have been pre-defined in the system, you can add them to your workflow template if they meet your requirements for the process being defined.

A component template that is added to a workflow process template is a copy and is no longer linked to the original component template. If changes are made to the original component template, a component template previously added to a workflow process template does not inherit those changes.

### To add a component template:



- 1 Position the cursor over the Components icon, then click and hold down the left mouse button.
- 2 Drag the Components icon over an activity so that the component template precedes, follows, or parallels the activity.

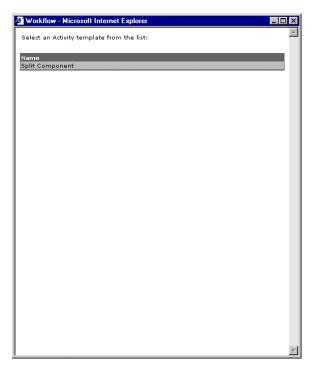
Notice that a rectangle outlined in red appears along with the icon.

To select the placement of the activity, position the red rectangle in one of the positions described in the following table and release the left mouse button.

**Note:** The position of the activity is determined by where the red rectangle is located when you release the mouse button.

When positioned	The activity is placed
over the first half of the current activity	before the current activity
over the last half of the current activity	after the current activity
over the top half of the current activity	above the current activity
over the bottom half of the current activity	below the current activity

After you release the mouse button, the Workflow window displays a list of component templates.



3 Click the component template you want to add to the workflow template. The Workflow window closes and the component template is added in the workflow designer.

# Modifying an activity

In the process of designing a workflow template, after activities are created, they may need to be moved to another location in workflow, re-defined using different options, or renamed.

The Sample activity provided in the initial workflow designer must be modified if you want to use it within your workflow template.

Activities can be modified before or after the workflow template is saved.

**Note:** Modifying an activity within a workflow template that has already been created does not effect process instances that are currently running. After a process instance is started, it is no longer linked to the workflow template.

### To modify an activity

- 1 Click the activity you want to modify.
  - The Workflow window for the selected activity displays the activity details.
- 2 Make the required modification to the activity details.
  - Depending on the activity you are modifying, see *Creating a new activity* on page 249, *Creating a Select activity* on page 258, *Creating a Jump activity* on page 262, or *Adding a Component Template* on page 263 for specific instructions on defining activity details.
- 3 Click Update.

## **Deleting an activity**

Activities can be deleted from a workflow template before or after you save the workflow template.

**Note:** Deleting an activity within a workflow template that has already been created does not effect process instances that are currently running. After a process instance is started, it is no longer linked to the workflow template.

## To delete an activity:

1 Using the left mouse button, click the activity you want to delete and hold down the mouse button.



**2** Drag and drop the activity onto the Trash icon.

# Saving the Workflow template

After you complete a new workflow template, you must save the template.

# To save the workflow template:

▶ Click Create.

The workflow template is added to the List of Workflow templates.

**Note:** If you exit the **Create a New Workflow** page prior to clicking **Create**, all changes to the workflow template are discarded.

# Creating a workflow template from another template

A workflow template can be created from a defined workflow template that has many of the same activity sequences.

### To create a workflow template from another template:

- 1 Log on to your Web application to display the Navigation Menu on your Home page.
- 2 Click the Workflows tab, or click Workflows from the Navigation Menu. The Workflow menu appears in the left pane.
- 3 Click Template Design from the Workflows left pane menu to display the List of Workflow templates page.
- 4 Locate and click the name of the workflow template you want to use as the base for the new workflow template.
  - The **Details** for template page appears.
- 5 Make modifications to the template to accommodate the required activities for the new template.
  - See Creating a workflow template on page 244 for information on adding, modifying, or deleting activities.
- **6** Change the name of the template.
- 7 Click Save As to save the workflow template with the new name.

# Modifying a Workflow template

A workflow template can be modified as necessary to ensure its continued alignment with the business process it represents.

**Note:** Modifying a workflow template does not affect process instances that are currently running. After a process instance is started, it is no longer linked to the workflow template.

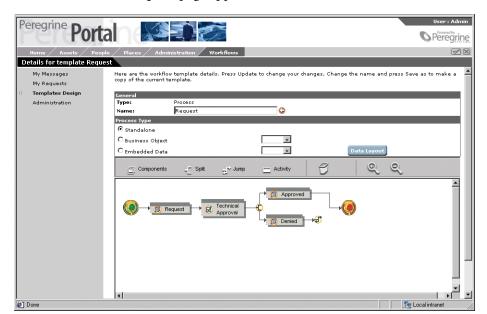
# To modify a workflow template:

- 1 Log on to your Web application to display the Navigation Menu on your Home page.
- 2 Click the Workflows tab, or click Workflows from the Navigation Menu. The Workflow menu appears in the left pane.

3 Click **Templates Design** from the Workflows left pane menu to display the List of Workflow templates page.



- 4 Locate the workflow template you want to modify.
- 5 Click the name of the workflow template you want to modify.



The Details for template page appears.

- 6 Make the necessary modifications to the template. See *Creating a workflow template* on page 244 for information on adding, modifying, or deleting activities.
- 7 Click **Update** to update the workflow template and return to the **List of Workflow templates** page.

# **Deleting a Workflow template**

When a workflow template is no longer useful or the process has been redefined as another template, you can delete the workflow template.

**Note:** Deleting a workflow template does not effect process instances that are currently running. After a process instance is started, it is no longer linked to the workflow template.

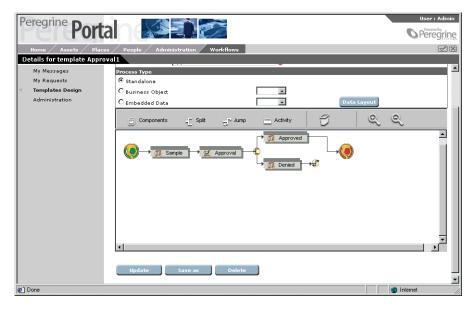
## To delete a workflow template:

- 1 Log on to your Web application to display the Navigation Menu on your Home page.
- 2 Click the Workflows tab, or click **Workflows** from the Navigation Menu. The Workflows menu appears in the left pane.

3 Click **Template Design** from the Workflows menu to display the **List of Workflow templates** page.



- 4 Locate the workflow template you want to delete.
- **5** Click the name of the workflow template you want to delete. The **Details for template** page appears.



6 Scroll to the bottom of the page, and then click Delete to delete the workflow template and return to the List of Workflow templates page.

The workflow template list no longer displays the name of the deleted workflow template.

# Creating a Component template

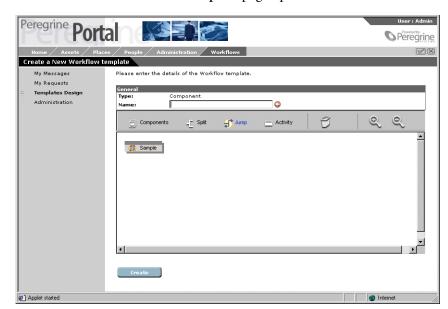
Component templates are a set of activities that represent a portion of a process. These templates can be used when designing workflow process templates.

### To create a component template:

- 1 Log on to your Web application to display the Navigation Menu on your Home page.
- 2 Click the Workflows tab, or click **Workflows** from the Navigation Menu. The Workflow menu appears in the left pane.
- 3 Click Template Design from the Workflows left pane menu to display the List of Workflow templates page.

**Note:** After component templates are defined, the template name and type (Component), appears in the list.

4 Click New Component.



The Create a New Workflow template page opens.

- 5 In the Name text box, type the name of the new component template.
  - The component template defines a specific set of activities. The name assigned to the template *must* be unique.
  - Notice that the workflow designer contains only a sample activity. Since a component template is designed to be added to a workflow template, component templates do *not* contain the Start and End activities.
  - The sample activity can be modified for use in the component template or deleted. See *Modifying an activity* on page 265 and *Deleting an activity* on page 266.
- **6** In the workflow designer, create and add activities to the component template using the toolbar icons described in the following table.

lcon	Description
G Components	Select a new activity from the template list.
	See <i>To add a component template</i> : on page 264 for information on adding an activity from the template list.
Split Split	Create a new Select activity.
	See <i>To create and add a Select activity:</i> on page 259 for information on adding a Select activity.

lcon	Description
Jump Jump	Create a new Jump activity.  See <i>To create and add a Jump activity</i> : on page 262 for information on adding a Jump activity.
Activity	Create a new activity.  See <i>To create and add a new activity</i> : on page 249 for information on adding a new activity.
e e	Trash. See <i>To delete an activity:</i> on page 266 for information on deleting an activity from a workflow template.

In addition to the activity icons on the toolbar, zoom functionality is provided by the following toolbar icons.

lcon	Description
0	To zoom in on the workflow template graphic, click the <b>Zoom in</b> icon until the required magnification is achieved.
Q	To zoom out on the workflow template graphic, click the <b>Zoom out</b> icon.

To create and add a new activity, see Creating a new activity on page 249. To create and add a Jump activity, see Creating a Jump activity on page 262. To create and add a Select activity, see, Creating a Select activity on page 258. To add a component template for inclusion into this component template, see Adding a Component Template on page 263.

See *Modifying an activity* on page 265 and *Deleting an activity* on page 266 for information on modifying and deleting activities.

### 7 Click Create.

The component template is added to the List of Workflow templates.

**Note:** If you exit the Create a New Workflow page prior to clicking Create, all changes to the workflow template are discarded.

# **Using Workflow Administration**

This section explains the functions available in Workflow Administration activity. The functions described include:

- Accessing the Administration function on page 274
- Monitoring process instances on page 275
- *Updating a process instance* on page 276
- Starting a new process instance on page 278
- Viewing the Event Queue on page 281
- Setting Up the Request List on page 282
- Uploading JavaScript Files on page 289

# **Accessing the Administration function**

The workflow administration functions can be accessed only by users having the required capabilities (permissions).

### To access the Administration function:

- 1 Log on to your Web application to display the Navigation Menu on your Home page.
- 2 Click the Workflows tab or click **Workflows** from the Navigation Menu. The Workflows links appear in the left pane.
- 3 Click the Administration link display the Administration of processes form.



From this page you can select the following areas of administration:

- Process list
- Start a new process

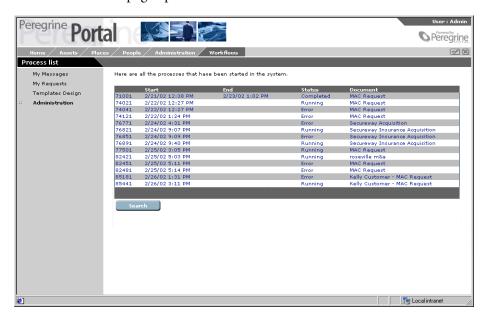
- Event queue
- Request List Setup
- Upload JavaScript Files
- Export Workflow Templates
- Import Workflow Templates

# **Monitoring process instances**

Using the **Process list** administration function, you can monitor the status of all process instances started in the system.

### To view the process list:

1 From the Administration of processes page, click Process list.
The Process list page opens.



A list of all processes started in the system opens in the Process list window. The list contains the following columns of information about the associated process instance:

Reference—The reference number assigned to the process instance.

Start—The date the process instance was started.

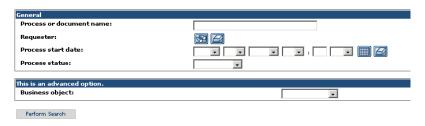
End—The date the process instance was completed.

Status—The current status of the process instance (Timed out, Completed, Running, Error).

Document—A description of the process instance.

- 2 If you want to sort the list according to a particular column attribute, click on the heading of that column.
- **3** If you do not see the specific process instance you are looking for or if you want to search by specific criteria, click **Search**.

The Template Search page opens.



**4** Enter your search criteria in the fields provided, and then click **Perform Search**.

A list of the processes matching your search appears.

5 Click Search again to rerun your search, or click the Administration link to return to the Administration of processes page.

# **Updating a process instance**

A process instance can be updated through the **Details for process** page. The most common reason to update a process instance is that an error has occurred during routing and the process instance has stopped.

**Important:** After you update a process instance because an error occurred, use the procedure in *Viewing the Event Queue* on page 281 to locate the process instance error and restart the process instance.

### To update a process instance:

- 1 From the Administration of processes page, click Process list to display the Process list page.
- 2 If you want to sort the list according to a particular column attribute, click on the heading of that column.
- 3 Use the process instance Reference number to locate the process instance you want to update, or click **Search** to search for existing work processes.
- 4 Click the process instance to display the **Details for process** page for the selected process instance.



- 5 Make the necessary changes to the process instance activities.
  - **Note:** You cannot change a process instance activity that has already been processed.
- 6 Click **Update** to apply the changes and return to the **Process list** page.

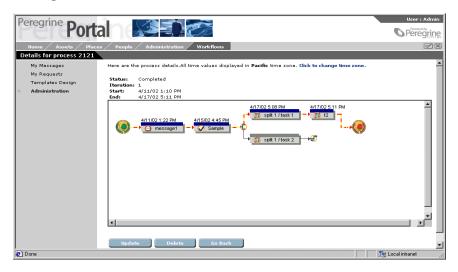
# **Deleting a process instance**

Documents within the knowledgebase are associated with a workflow process instance. When these documents are created, a process instance is started. Even when a document is deleted, the process instance continues, which means task messages might be sent to users on the system. These messages may be distributed to the user assigned a task, as well as all users with the same role.

After a document is deleted, the process instance associated with the deleted project or contact must also be deleted.

### To delete a process instance:

- 1 From the Administration of processes page, click **Process list** to display the Process list page.
- 2 Use the process instance reference number to locate the process instance you want to delete.
- **3** Click the process instance to display the Details for process page for the selected process instance.



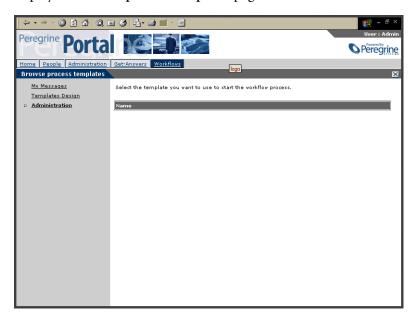
4 Click Delete to delete the process instance and return to the Process list page.

# Starting a new process instance

You can manually start processes that are not related to projects or contracts using the **Start a new process** administration function.

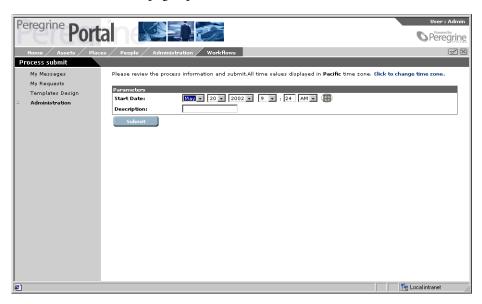
## To start a process instance:

1 From the Administration of processes page, click Start a new process to display the Browse process templates page.

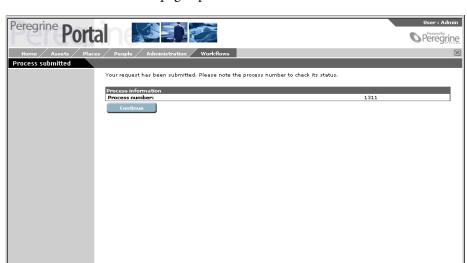


2 From the list of templates, select the template you want to use to start the workflow process.

## The Process submit page opens.



- 3 In the Start Date fields, select the date and time that you want the process to start. You can use either the drop-down lists by each field, or click the calendar to select a date.
- 4 In the Description text box, type a description for the new process instance.
- 5 Click Submit.



The Process submitted page opens.

The process number assigned to the new process appears in the Process information frame. Note the process number.

**6** Click Continue to return to the Administration of processes page.

# **Viewing the Event Queue**

Done

The Workflow Event Queue is made up of two queues:

- Internal events occurring within the OAA workflow engine. These events have a Process Id. They are listed in the first section on the Event Queue page.
- External events started outside the OAA workflow engine. Examples include Notification Services events. These events have a Queue Id. They are listed in the second section of the Event Queue page.

### To view events:

1 From the Workflows page, click Event Queue.



2 To view the details of an event, click any of the column entries associated with that event.

The Event detail page opens.



- 3 After reviewing the error information, you can do one of the following:
  - Click Update for processing to restart processing.
  - Click Go Back to return to the Event Queue page.
  - Click Edit Process to go the process instance and correct the issue.

# **Setting Up the Request List**

The Request List is a collection of request definitions that process a specified workflow template. A workflow template of any process type can be used for the request definition. However, when the process type is Embedded Data, the data is embedded in the workflow process. For example, a request list definition could be used to order business cards for employees, or to process change of address requests. When the workflow process type is Embedded Data, the employee information data is available to each workflow activity.

A request definition can be used to provide various request functions. However, you may need a programmer to write specific scripts that provide the functionality required by your request definitions.

After the system creates a request definition for the request list, a user who has the required capabilities can view the list and create new requests through My Requests.

## **Searching for a Request Definition**

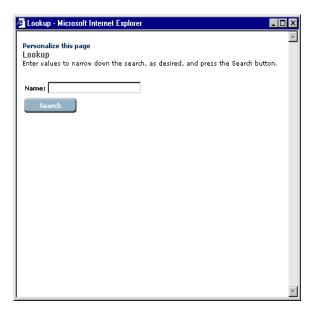
The Request Search page provides search functionality. You can search using the available text box. To narrow the search, provide as much information as possible.

## To search for a request definition:

1 From the Administration of processes page, click Request List Setup to display the Request Search page.



**2** Type the request definition name in the **Name** text box. If you know part of the name, you can type it between% (percent) signs. 3 Click the binoculars icon next to Workflow Template to display the Lookup Contact Phone window.



- 4 Using this window, locate and select the workflow template.
- 5 Click **Search** to filter the list of request definitions and display only those matching the search criteria.



**Note:** You can sort the search results list by any of the displayed columns. To sort the list, click the column title.

The Request Search Results page displays only the request definitions matching the search criteria. From the list, you can access the details for a request definition by selecting one of the column entries for a specific request definition. The **Request Details** page displays the details for the selected user.

## To view all request definitions defined in the system:

Click View All.

To perform a new search:

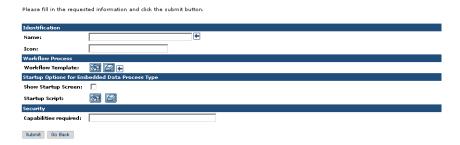
▶ From the Request Search Results page, click New Search to display the Request Search page.

## Setting Up a New Request Definition

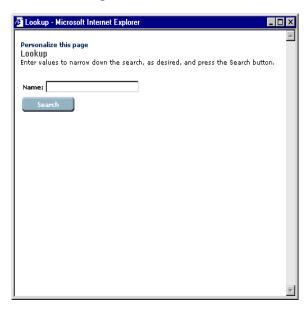
Use the following procedures to define, modify, or delete request definitions.

### To set up a request definition:

- 1 From the Administration of processes page, click Request List Setup to display the Workflows Request Search page.
- 2 Click New.
- 3 The Create New Request page opens.

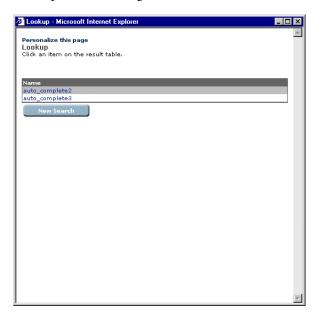


- 4 Type a name for the request definition in the Name text box.
- **5** Type the path for the icon in the **Icon** text box.
- **6** Click the **binoculars** icon next to Workflow Template to display the Lookup Workflow Template window.



- a Using this window, define your search criteria.
- **b** Click Search.

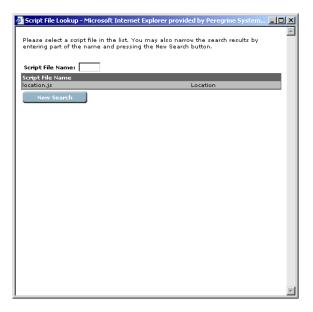
The Lookup Workflow Template window displays a list of all workflow templates matching the search criteria.



- **c** From the list, select the workflow template to associate with the request definition.
- 7 Select the Show Startup Screen check box if the workflow template was created as an Embedded Data process type.

See To create a workflow template: on page 245.

**8** Click the search icon next to Startup Script to display the Script File Lookup window.



- **9** Locate and select the script file you want to use.
- **10** To add a capability, type the capability in the **Capabilities required** text box.

**Important:** The user must be assigned a role with that capability.

11 Click Submit.

The Workflow Request Details page opens and displays the information you have entered.

12 Click Submit Changes.

# **Modifying a Request Definition**

Request definitions can be modified using the Workflow Request Details page.

# To modify a request definition:

- 1 To search for the request definition you want to modify, see *Searching for a Request Definition* on page 283 for information on using the search function.
- **2** Select the request definition from the Request Search Results page to display the Workflow Request Details page.

The Workflow Request Details page displays the information for the request definition you selected.

- **3** Make any changes to the request definition information.
- 4 Click **Submit** to save all changes to the request definition information.

#### **Deleting a Request Definition**

Request definitions can be deleted from the system through the Workflow Request Details page.

#### To delete a request definition:

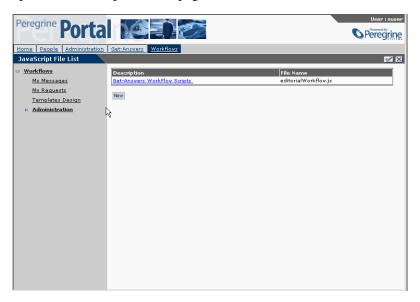
- 1 To search for the request definition you want to delete, see Searching for a Request Definition on page 283 for information on using the search function.
- 2 Select the request definition from the Request Search Results page to display the Workflow Request Details page.
  - The Workflow Request Details page displays the information for the request definition you selected.
- 3 Click Delete.
  - A delete confirmation message appears.
- 4 Click **OK** to delete the request definition from the system.

# **Uploading JavaScript Files**

JavaScript files must be uploaded to the server before they can be assigned to a workflow process activity. Use the following procedures to upload all JavaScript files you want to make available for use in your workflow templates.

#### To view uploaded JavaScript files:

1 From the Administration of processes page, click Upload JavaScript Files to open the JavaScript File List page.



A list of all script files that have previously been uploaded to the server appears. The list contains the following columns of information about the script file:

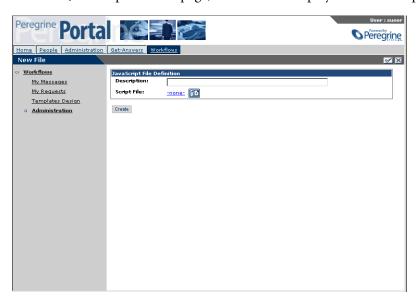
Description—A description of the script file function.

File Name—The name of the script file.

2 To view the script file details, click the entry in the description column for the JavaScript file you want to review.

#### To upload a new script file:

1 From the JavaScript File List page, click New to display the New File page.

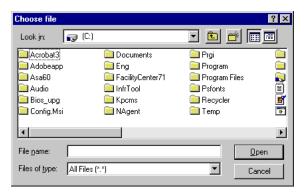


- **2** Type a description of the script file in the **Description** text box.
- 3 Click the Plus icon to display the Select a File window.



Œ

**4** Use the **Browse** button to display the Choose file window.



- **5** Locate and select the script file to upload.
- 6 Click OK.

The Script File entry displays the selected file name.

7 Click Create to save the new script file.
The JavaScript File List page displays the new script file in the list.

#### **Updating a Script File**

A script file can be updated through the Update File page.

**Warning:** Use caution when updating a script file. Changing the information may produce unwanted or unexpected results.

#### To update a file:

1 From the JavaScript File List page, select the file you want to update. The Update File page appears.



2 Make any required changes in the **Description** text box.



- **3** If you want to add a new file attachment, click the Plus icon to display the Select a File window and add a new file attachment.
- 4 Click Save to save the changes and return to the JavaScript File List page.

### **Deleting a Script File**

Script files can be deleted from the system through the Update File page.

**Warning:** Use caution when deleting a script file. Deleting a script file that is used in conjunction with a workflow may produce unwanted or unexpected results.

#### To delete a script file:

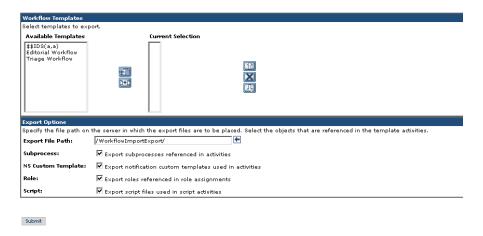
- 1 From the JavaScript File List page, select the file you want to delete. The Update File page appears.
- Click Delete.A delete confirmation message box opens.
- 3 Click OK to confirm the delete and return to the JavaScript File List page.

# Importing/Exporting Workflow Templates

Workflow templates can be moved from one Get-Answers installation to another. It is as simple as exporting them from one system and importing them to another

#### To Export:

- 1 In Get-Answers, click the Workflows tab.
- 2 Click the Administration link.
  The Administration of processes page opens.
- 3 Click Export Workflow Templates.
  The Export Workflow Templates page opens.



4 In the Available Templates list on the left, double-click the templates you want to export.

They appear in the Current Selection box.

- 5 In the Export Options section, type the Export File Path for the exported templates.
- 6 Click the Subprocess, NS Custom Template, Role, and Script check boxes to include these elements in the export, if applicable.
- 7 Click Submit.

A confirmation message appears in the Workflow Export Results page that opens. Be sure to note the location on the server where the files were saved.

#### To Import:

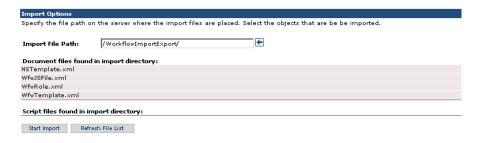
- 1 In Get-Answers, click the Workflows tab.
- **2** Click the **Administration** link.
- 3 Click Import Workflow Templates.

The Import Workflow Data page opens.



4 In the Import Workflow Data file page that opens, enter the path to the workflow template(s) you want to import, and then click Next.

The Import Workflow Data page re-opens with the files and scripts you have selected to import listed.



- 5 Verify the Files in the import directory are correct and click Start Import. A message informs you that the Import completed.
- **6** To verify the import, click **Templates Design**. The Templates appear in the list. See *Modifying a Workflow template* on page 267 for details about modifying a template.

# **Using the Request List**

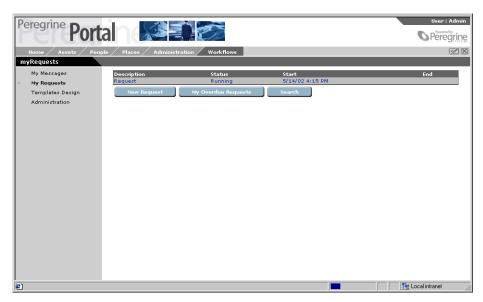
The My Requests Request activity lists requests for the admin user currently logged in. This section explains how to view request definitions, start a new request workflow, and view overdue requests.

# **Accessing My Requests**

Use the following procedure to access My Requests.

#### To access My Requests:

- 1 Log on to your Web application to display the Navigation Menu on your Home page.
- 2 Click the Workflows tab or click Workflows link. The My Messages page opens.
- 3 Click My Requests to display the My Requests page.



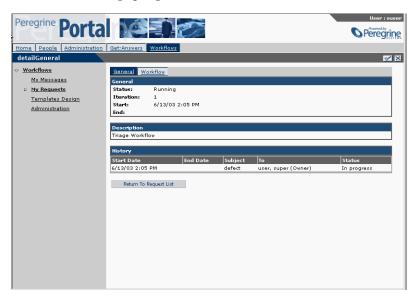
# **Viewing Request Details**

Use the following procedure to view the details of a request.

#### To view the request details:

1 In the description column, click the description for the request you want to review.

The detailGeneral page opens.



This General tab displays general information about the request, the request description, and the request process history. The Workflows tab displays the workflow template used for this process instance.

From the Workflows tab you can modify the process workflow. See *Modifying a Workflow template* on page 267.

2 On the General tab, click **Return to Request List**, to re-display your request list.

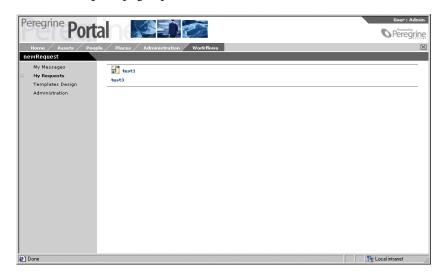
# **Initiating a New Request**

Use the following procedure to initiate a new request.

**Note:** Before any system users can initiate a new request, there must be at least one workflow for a New Request Definition available. See *Setting Up a New Request Definition* on page 285.

#### To initiate a new request:

1 From the My Requests page, click New Request.
The New Request page opens.



**2** Click on the request you want to initiate.

The workflow process instance for the request appears in the request list of your **My Requests** page.

# **Viewing Overdue Requests**

Use the following procedure to view overdue requests.

#### To view your overdue requests:

1 From the My Requests page, click My Overdue Requests.
The Overdue Requests/Assignments search page opens. It displays a list of your overdue requests.



**Note:** Times appear according to the time set in your Change Time Zone Preference page. To change to another time zone, from the Home tab, click the Click to change time zone link, select a time zone, then click **Submit**.

- 2 Click the search icon next the overdue request to view the details of a request. The detailGeneral page opens and displays the details of the request.
- **3** If you want to view your team's overdue requests or assignments, select the appropriate option button.
- 4 Click Perform Overdue Search.

The **Overdue Request/Assignments** page displays the information you requested.

# **Admin Settings for Workflow**

- 1 Log on with an administrator role.
- **2** Click the **Administration** tab.

The Control Panel page opens.

3 Click Settings.

The Admin Settings page opens.

- 4 Click the Workflow DB tab.
- **5** Read the instructions on the page. Determine the settings you need to change (if any). Make the changes.
- 6 Click Save.

The Control Panel appears.

- 7 Click Settings.
- 8 Click the Workflow Engine tab.
- **9** Read the instructions for each field. Determine the settings you need to change (if any). Make the changes.
- 10 Click Save.

The Control Panel appears.

11 Click Reset Server.

A message informing you that the server reset was successful appears at the top of the page. The Administration Settings related to Workflow are now configured.

# **Setting Up Email Notifications**

You can set up Get-Answers to send an automatic notification to users when they have a Get-Answers Document Team task in their queue or their group's queue, such as the Get-Answers Team editor's queue. You need to have system and user administration rights to perform this task.

To setup email notifications:

- **Step 1** Set up the mail adapter link.
- **Step 2** Import the Notifications Templates (both of them).
- **Step 3** Reload the plugins.
- **Step 4** Add the notification to each workflow action.
- **Step 5** Add email addresses.
- **Step 6** Test email notification.

# **Set Up the Mail Adapter Link**

To setup the mail adapter link, you have to create an Admin user on the mail server. This is an account for OAA to use for sending email and retrieving responses.

#### To setup the mail adapter link:

- 1 From the admin.jsp page, click the mail adapter link.
- 2 Add the mail server name to the Inbound Mail Host and Outbound Mail Host fields.
- 3 Add the Admin user and password (created on the mail server) into the Inbound mail user ID, Inbound mail password and Outbound mail user ID and Outbound mail password.
- 4 Add the admin user's email address into the Mail sender address field.
- **5** Save the settings
- **6** Reset the server

Your settings should be as follows in the *local.xml* file within the *<settings>* element of the file.

```
<mail>
    <mailsender>admin@mymailserver.mycompany.com</mailsender>
    <mailuser>admin
<mailuser>admin
<mailuser>
<mailpassword>%f%Hu4HfT5DPd1qBqGJ@1biHxKg@1t@1t</mailpassword>
    <outmailhost>mymailserver.mycompany.com</outmailhost>

<outmailpassword>%f%Hu4HfT5DPd1qBqGJ@1biHxKg@1t@1t</outmailpassword>
    <mailprotocol>pop3</mailprotocol>
    <mailhost>mymailserver.mycompany.com</mailhost>
    <outmailuser>admin</outmailuser>
    </mail>
```

# **Importing the Notifications Templates**

You must import both Notification templates to use with email notifications.

#### To import the Notification templates:

- 1 From the login.jsp page, click the Administration tab.
- 2 Click the **Data Import** link in the Notification Services Administration section.
- 3 Click Next.
- **4** Check both rows in the table (*notificationservices\_en.xml* and *workflowplugin\_en.xml*).

Note: You may see others if you have localized languages.

5 Click Finish.

# **Reloading the Plugins**

You must reload the plugins so that they are active.

#### To reload the plugins:

- 1 On the Administration tab click the **Plug-In Status** link. The Workflow Plugin has the status of Inactive.
- 2 Click Reload Plug-ins.

The Workflow Plugin now has a status of Active.

# Adding the Email Notification to Each Workflow Action

You must now add the email notification task to the triage and editorial workflows.

#### To add the email notification to the Triage workflow:

- 1 In the Workflow tab, select Templates Design.
- 2 Open the Triage Workflow template.
- 3 Click the \$\$IDS (getanswers, Workflow Triage-Submit Title) box. The box is called an Action.
- 4 Click Next.
- **5** Check the **Notify assignee** of this task check box.
- 6 Click Next.
- 7 Click **Update** for the wizard.
- 8 Click **Update** for the template.

#### To add email notification to the Editorial workflow:

- 1 Open the Editorial workflow template.
- **2** For each of the Actions (by default there are five of Actions here):
  - **a** Click the action.
  - b Click Next.
  - **c** Check the **Notify assignee** of this task check box.
  - d Click Next.
  - e Click **Update** for the wizard.
- 3 Once each action is updated, click **Update** for the template.

# Adding Email Addresses for the Users

For each user that is either an Owner, Editor, or Reviewer on a Document Ownership Team, add their email address to the email collections. Make sure they have a primary email account.

#### To add email address for the users:

- 1 Click the People tab.
- 2 Click View All or search for the user whose profile you want to edit.
- 3 Click the name of the user for whom you are adding an email address.

**Note:** If emails is not showing on the people edit/ people create page, personalize the page to add it.

- **4** In the Emails section of the people edit page, click **Add** to open Create New Person Email window.
- 5 In the Email Type field, select primary and type the user's email address in the Email field.
- 6 Click OK.
- 7 Click Submit Changes.
- **8** Repeat steps 2-7 for each person whose email address needs to be added.

# **Testing Email Notification**

After you have setup email notification, you should test it to ensure that the emails are being sent correctly.

#### To test email notification:

- 1 On the Portal Page, click Send Notification.
- 2 Click Add.
- **3** Select a user (or users).
- 4 Set Device to Email.
- 5 Type "Notification Test" in the Subject line.
- **6** Type "Please respond to this email by clicking yes. Then click Submit" in the Text field.
- 7 Type "Did you receive this?" in the Question field.
- 8 Click the Send button.
- **9** Verify that the user(s) received their email and have the user(s) respond to the email.
- 10 Verify that you received the response on your Check Inbox screen.

If you did not receive a response or if a user did not receive an email, review the procedures for setting up automatic notification and make any changes required.

# 1 1 Importing Legacy Data

This chapter explains how to:

- Format data from other applications, such as Tivoli ServiceDesk or Knowlix, to the Get-Answers format.
- Import the data into the Get-Answers database.

For data from applications other than Knowlix, you must create an application that converts the data into the Get-Answers XML format. See *Converting legacy data* on page 306 for an explanation of the format and folder structure your data must take.

For Knowlix data, you can use a conversion utility available from Peregrine Systems to convert and structure the data. To do this, you must have purchased a license to upgrade from Knowlix to Get-Answers. See *Converting Knowlix data* on page 318 for more information.

Once you have converted your data, use Get-Answers to import it to the Get-Answers database. See *Importing your data to Get-Answers* on page 320 for more information.

When you have completed the steps in this chapter, you can customize the data you imported using Get-Answers' Document Types and Views, which are described earlier in this guide. See *Chapter 12, Document Types and Views*. For the converted and/or imported data you may need to:

- Add new views for any new document types created by importing data.
- Add input forms for the new document types.

- Add edit forms for the new document types.
- Add new fields from the new document types for searching.

# **Converting legacy data**

To take data from applications such as Tivoli ServiceDesk and format it so that you can use it in Get-Answers, you must create an application that converts your data to XML. This section explains how you must structure your files for the conversion.

#### To structure your files for conversion:

- **Step 1** Create an XML export file for each legacy document you want to import to Get-Answers.
- **Step 2** Create a directory structure for each XML export file based on its category or subcategory.
- **Step 3** Create a single directory for attachments. This directory holds all the supporting files for the documents.
- Step 4 Backup your directories.
- Step 5 Import data.
- **Step 6** Move the generated search engine fields for indexing.
- **Step 7** Create a new document type view for each document type you imported. See *Chapter 12, Document Types and Views.*

**Important:** The first three steps of these procedures do not apply to migrating Knowlix data to Get-Answers. For these procedures, see *Converting Knowlix data* on page 318.

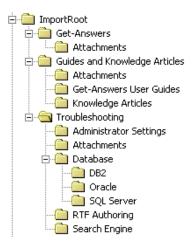
### **Overview**

Create a folder on the Get-Answers server, for example, ImportRoot. In this folder, order is important. When importing the legacy documents to Get-Answers, the top-most folder is the one that you specify in the Import Documents page, which is in *Importing your data to Get-Answers* on page 320.. The names of the folders directly under ImportRoot will be the names of top-level categories in Get-Answers.

Note: If the top-level category name already exists in Get-Answers under <u>any</u> document ownership team, a new top-level category will <u>not</u> be created. The existing top-level category will be the one used when you import the documents in the file structure beneath the top-level category. Thus, in the case of existing top-level categories, one import operation may be run to import documents for many document ownership teams. If a top-level category does not exist, it is created under the document team selected in the Import Documents screen. If you do not select a document ownership team, the system does not create new top-level categories.

To mirror your knowledgebase categories, create a set of subfolders in a hierarchy beneath the ImportRoot folder. Do this for each set of document category hierarchies that you want to import. When importing to Get-Answers, the top-level folders under this ImportRoot folder become top-level categories. Convert levels within your knowledgebase to subfolders; these become subcategories in Get-Answers.

In this example, the names of the three folders directly under ImportRoot will be the names of top-level categories that will be created in Get-Answers if they do not already exist. Each top-level folder may have an Attachments folder under it to hold those images or documents that are shared within the document team that owns the top-level category.



Each subfolder under a top-level category folder such as Troubleshooting will be created as a subcategory during the Import Document processing. In the example above, the top-level category named Troubleshooting has four subcategories, and Troubleshooting's subcategory named Database has three subcategories.

**Note:** The maximum number of characters in the name of a category is 32. You can alter the database to increase this limit. The database column that holds the top-level category is *KmDomain.Name*. Subcategory names are stored in the column, *KmDomainCategory.Name*. Alter both columns to increase the number of characters in a category.

Within each folder in your newly created hierarchy, place the documents that belong in that category. Examine the folder structure of your knowledgebase carefully to remove or consolidate any folders with very few documents in them. If one category has dozens of documents and two other categories on the same level have only a few documents, consider merging some of the categories, and combining the document sets into fewer categories to simplify the presentation to the end user and to shorten the amount of time it takes to download and display hundreds or thousands of categories.

**Important:** The files in these folders are deleted when they are successfully imported. Make a backup copy.

# For a single import

To prepare for a single import, you may want to create the document ownership teams and the categories those teams manage before you import. Once you have imported, you cannot change the team that managse the category that the documents are imported to. Nor are you able to quickly remove all the documents from a category unless the number is relatively few. Only a document team owner can set up a category to be managed by their team.

When you do that, make sure the category names match the directory names (that the document will import from) exactly, following the category naming restrictions.

# Varieties of documents to import

Three varieties of documents can be placed in a folder:

- 1 Externally created documents such as .txt, .pdf, doc, .html, .xml, etc.
- 2 The .xml documents that contain metadata fields (title, summary, etc) for the externally created documents in 1.
- 3 .xml 'authored' documents of a given document type, such as Problem/Solution, Error Message/Cause, etc, or any document type that exists within your company.

**Note:** How to create the document views to display the data in a document type is covered in *Chapter 12, Document Types and Views*. You first import the documents for a given document type so that all the possible fields in a document are known, and then you create the document view to display the particular subset of fields for that document type.

# **Externally created documents**

If an externally created document (1) has an .xml extension, it does not contain a <rKmDocument> element.

This is an example of an externally created document:

A text file named readme.patch.txt placed in the Troubleshooting folder.

#### .XML documents with metadata

All .xml documents that contain metadata fields (2) have an .xml file extension and contain these elements at a minimum:

This is an example of an .xml document with metadata:

A file named **5342.xml** placed in the Troubleshooting folder that contains metadata for the **readme.patch.txt** file. It contains these elements:

#### .XML 'authored' documents

All .xml authored documents (3) have an .xml file extension and contain these elements at a minimum:

This is an example of an .xml authored document:

A file named AuthLicense.xml placed in the *Troubleshooting/RTF Authoring* folder that is a Problem/Solution (probsol) document type. It contains these elements:

```
<![CDATA[<p>A licensing problem is encountered when the user tries to
           Author rich-text-field documents.]]>
     </rtf field1>
     <rtf_field2 xml:space="preserve">
     <![CDATA[<p>
     1. When logging into the application server, use the server name (for example,
     http://servername/oaa/login.jsp) instead of <a href="http://localhost/oaa/login.jsp">http://localhost/oaa/login.jsp</a>.
      <br />
     2.As the Admin user, check the Server URL setting under the Common tab in
     Administration Settings to ensure that the server name for the Get-Answers
     server is correct.
      <br />
      3.Examine the DNS mappings on your system and ensure that each server
     name is correct.
      </rtf_field2>
</rKmDocument>
```

# **Creating XML export files**

You must convert structured documents from other knowledgebase applications such as Tivoli Service Desk to an XML format that Get-Answers can read. This section describes the format your XML documents must use.

The <DocType> attribute in the XML exported from KBMigrate (and any manually created by the user) is imported as a lower case StorageValue in the DocType.

For Example:

<DocType>Reference</DocType>

is mapped to a DocType with a Name of Reference and a StorageValue of reference. It maps directly to the out-of-box Get-Answers Reference DocType. Users should be aware that Knowlix migrated documents have a Reference DocType but do not use the same form fields as the Get-Answers Reference DocType. This means you should either re-personalize the out-of-box Reference Type (if they have no existing documents in the system of this type), or you should modify the XML used by the Document Import to change the <DocType> element to a unique (case-insensitive) DocType.

# **Creating the XML documents**

Each field in the XML document contains data. The following table describes the supported fields. After you import the documents, the fields reside in the database. Defined fields such as Title are discrete and use a field in the database. However, you can use any fields you like in your XML documents. Fields in your documents that are not listed below are written to an XML metadata file, which is then stored in the database as a binary large object (BLOB) field.

When creating fields different from the fields in the following table, keep the following guidelines in mind:

- Use letters, digits, underline characters, dash characters or periods in your field names. Get-Answers supports them.
- Do not use spaces in the field names.
- See the W3C document "Extensible Markup Language (XML) 1.0 (Second Edition" at the http://www.w3c.org/TR/REC-xml for a thorough list of guidelines on creating XML documents.

The following table shows the fields (XML) that are stored in the database. The Search engine indexes these fields. When you use these fields in your XML export documents, keep the following in mind:

- You must spell these tags exactly as they appear here.
- These tags are case-sensitive. When you use these tags, match the case as it appears here.
- The table includes four Tivoli Service Desk fields: System, Component, Item, and Method (SCIM). Although Get-Answers does not save these fields in a hierarchy, the Search engine does search them individually.
- Wrap each text field with: <![CDATA[text]]>
- The fields that are required have "required" in the Field/XML Tag column.

Field/XML Tag	Description	Max Number of Bytes
Component	Tivoli Service Desk Component field	40
CreationDate	Date the document was created. The date format is: mm/dd/yyyy. The default is the current date.	N/A

Field/XML Tag	Description	Max Number of Bytes	
DocType	The storage value of the document type. It is a value with no spaces in it such as probsol, errormsg, howto, reference, or any company-specific document type storage value. For an example of how storage value is used, see <i>To create a new document view:</i> on page 335.	32	
dtLastModify	Date the document was last changed in any way. The format is mm/dd/yyyy. The default is the current date.	N/A	
ExpDate	Date the document expires and should be reviewed. This field is used only for reporting. The format is mm/dd/yyyy. The default value is last modified date plus one year. (Last modified date appears as LastModified in the database.) If no last modified date is specified, the ExpirationDate field default is then CreationDate plus one year. If no creation date is specified, the default is the current date plus one year.		
ExternalDocument Name	ternalDocument Name The file name of the externally created document (pdf, doc,etc.) that resides in the same folder as this xml file.  This is required for xml documents with metadata for externally created documents.		
guid	Global document ID that identifies the document within the system from which the document is imported. Do no use spaces or blank characters in this field.	38	
Item	Tivoli Service Desk Item field	40	
OwnedDocs	Semicolon-delimited list of any files associated with this document's team. This includes images, word processing documents, executables, and so on.	N/A	
The summary of the document or synonyms that help the user find the document. You cannot use unmatched single quotes, apostrophes, or unmatched double quotes here.		1024	
System	Tivoli Service Desk System field	40	
Title (required)	,		

This is an example of a company-generated .xml authored document:

```
- <LegacyId>
   <![CDATA[ 50541D2078FE910E7C_0202 ]]>
 </Legacyld>
- < Group>
   <![CDATA[ Approval_Initial ]]>
</Group>
- <Title>
   <![CDATA[ Rich Text example with all rich text markup from Knowlix ]]>
</Title>
- <Product_Class>
   - <![CDATA[ ]]>
 </Product_Class>
- <Operating_System>
   - <![CDATA[ ]]>
</Operating_System>
- <Creation_Date>
   - <![CDATA[ 08/26/2003 11:51:36 ]]>
 </Creation_Date>
- <Last_Modified>
   - <![CDATA[ 08/26/2003 11:58:43 ]]>
 </Last_Modified>
- < Priority>
   - <![CDATA[ 0 ]]>
 </Priority>
- <Problem renderHTML="true" xml:space="preserve">
   - <![CDATA[
      11>
 </Problem>
- <Solution renderHTML="true" xml:space="preserve">
   - <![CDATA[
      This is a line of regular text
      This is <b>bold</b>
      This is <i>italics</i>
      This is <u>underlined</u>
      This is <b><i>bold and italics</i></b>
      This is <b><u>bold and underlined</u></b>
      This is <b><i><u>bold and italics
          and underlined </u></i></b>
      This is <i><u>italics and underlined</u></i>

       This is a font <font face ='Courier</pre>
          New'>change</font>
      This is a font size <font size =5>change</font>
      This is a font color <font color =</pre>
```

```
#0000FF>change</font>
       This is a font face, color and size <font face ='Courier</pre>
          <font size =5><font color =
            #0000FF>change</font></font></font>
       <font color = #0000FF></font><font color =</pre>
          #0000FF></font>
       This is a bulleted list:
       •   line 1
       •   line 2 
       •   line 3
       This is a numbered list
       1.   line 1
       2.   line 2
       3.   line 3
       11>
 </Solution>
 - <AuthorName>
    - <![CDATA[ jsmith ]]>
 </AuthorName>
 - <KnowlixDocument_ID>
    - <![CDATA[ S97-M18-PZSW ]]>
 </KnowlixDocument ID>
 - <History>
    - <![CDATA[
       "08/26/2003 11:51:36", "jsmith", "Created"
       "08/26/2003 11:58:43", "jsmith", "Modified"
       "08/26/2003 11:58:47","jsmith","Approved: Initial"
       "08/26/2003 11:58:53","jsmith","Copied to Smoke Test NFO"
  ]]>
 </History>
 - < Jump Destination >
    - <![CDATA[ ]]>
  /JumpDestination>
 - <OwnedDocs>
    - <![CDATA[ ]]>
 </OwnedDocs>
</rKmDocument>
```

# Changing field size in the database

If you want to increase (or decrease) the size of a field in the database, you can do this using the KmDocument.tbl file and rKmDocument.xml file.

#### To change the field size in the database:

- 1 Open the KmDocument.tbl file, which you can find in the following directory: \WEB-INF\bizdoc\tables
- 2 Find the field whose size you want to change. Here is an example of the field "Title."

- 3 Change the number of characters in the <Length> line. Change 128 to 162, for example.
- 4 Save the file.
- 5 Open the file, rKmDocument.xml in \WEB-INF\apps\oaagen\schema and locate the field.
- **6** Change the *length* = "x" attribute to the new length.
- 7 Save the file.

# Adding fields for search engine indexing (import)

The import process generates the FIELD definitions for you and saves them in an rware\_cfg.txt file in the same folder as the KmDocument.xml file. This folder is:

\WEB-INF\apps\oaagen\schema\extensions\

Once you run the import process to add fields to the KmDocument.xml and rKmDocument.xml files, use the procedure described in this section to make sure the Search engine finds them during searching.

### To add fields for indexing:

- 1 Backup the rware.cfg file in the <search-engine-install-path>\Peregrine\config directory on your search engine server.
- **2** Open the file rware.cfg.
- 3 Find the LIBRARY "KMLib" section of the file.

- 4 Paste the contents of rware\_cfg.txt into the KmLib section of the rware.cfg file.
- 5 Save the file.

# Adding fields for search engine indexing

You can also add a field for search engine indexing without using the import process.

- 1 Backup the reware.cfg file in the <search-engine-install-path>\Peregrine\config directory on your search engine server.
- 2 Open the file rware.cfg.
- **3** Find the LIBRARY "KMLib" section of the file.
- 4 For each field you added to the XML schemas, add the following text to the LIBRARY KMLib section, substituting "Question" with the name of your field and "113" with the size of your field:

```
FIELD "Question" {

INFO "Question";

UF_NAME "Question";

PRECEDENCE 1;

SIZE 113;

TYPE STRING;

FLAGS STORED INDEXED VISIBLE NATURAL_LANGUAGE USER_SEARCH WITH_BODY SORTABLE SEARCHABLE RESULTS_LIST DOC_VIEW;

}
```

In sum, change the information in the FIELD, INFO, and UF\_NAME fields, and enter the size in bytes in the SIZE field. The type is always STRING.

**5** Save the file.

**Note:** See *Changing field size in the database* on page 315 to update the field size in the database for the field you added.

# **Converting Knowlix data**

To convert Knowlix data, use Peregrine's conversion utility to format your documents and create the required folder structure for Get-Answers. If you have purchased a license to upgrade from Knowlix to Get-Answers, then you have this application. You can use it now and then go to the next section when you are ready to import your data to Get-Answers.

If you do not have the conversion utility and would like to purchase it, contact your Peregrine Professional Services representative.

# Preparing for the conversion from Knowlix

The following are the steps you should perform to prepare the documents you are planning on converting from Knowlix to Get-Answers.

- 1 Move all knowledge articles from Unofficial.nfo to the correct category
- **2** Move articles into separate nfos according to their main category. Categorization of documents is simplest while importing into Get-Answers.
- **3** For each knowledge article type you can use KnowlixAuthor to:

**Note:** You should use print screen to capture and save the information you will need when to prepare to migrate documents and manage the documents after they have been migrated.

a See the list of knowledge article types.

To see the list of knowledge article type that you use, from KnowlixAuthor, create a new article (Edit/New Entry).

View the list of document types in the document type drop-down box.

**b** View the input forms used.

To capture an input form, from KnowlixAuthor, open each form in form designer.

View each field, including the actual name used, which are imported into Get-Answers.

**Note:** The field name imported into Get-Answers will have spaces replaced with underscorcs (\_) because xml standards do not allow for spaces in field names.

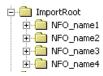
**c** View the document views used.

While you are viewing each document type (in KnowlixAuthor), print it as well to the view used for each document type. All of this information will be useful later when you are creating new input forms, edit forms, views for the documents in Get-Answers.

# Running the migration from Knowlix

These are the recommended procedures for using the Knowlix migration wizard to import knowlix data to Get-Answers. See the Knowlix migration document for more information.

- 1 Run the Knowlix migration wizard on each nfo.
- 2 When you make each category of knowledge documents (Human Resources for example) a separate nfo in Knowlix, the migration wizard generates a directory with the same name as the nfo. If you want the nfo name to be the name of the top-level category in Get-Answers, put this directory under ImportRoot. The name of this directory becomes the name of a top-level category in Get-Answers.

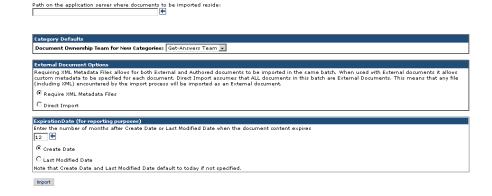


# Importing your data to Get-Answers

Once you have converted your data, either from Knowlix or from another application, such as Tivoli ServiceDesk, use the procedure in this section to import the data into the Get-Answers database.

#### To import converted documents into Get-Answers:

- 1 Move the data you have converted to a directory on the Get-Answers server:
- 2 Start Get-Answers.
- **3** Click the **Get-Answers** tab.
- 4 On the left panel, click the **Import Documents** link. The Import Document page opens, as shown here.



#### **5** On this page:

- Type the directory path for the location of the documents you are importing. (Required entry)
- In the Document Ownership Team field, choose a document team to manage the documents.
- In External Document Options select either Require XML Metadata Files (allows you to import files containing both External and Authored documents with custom metadata), or Direct Import (all the documents being imported are External documents).
- In the Expiration Date section, choose the number of months before the documents expire, and then choose whether the documents expire by creation date or last modified date.

### 6 Click Import.

The following message appears: "The file import is complete. See the getanswers\_document\_import.log for detailed results."

# Managing migrated documents

After documents are migrated from Knowlix, you need to manage these documents by performing the following tasks:

- Setup permissions
- Setup searching
- Extend the database
- Create input and edit forms
- Create views
- Remove like-named document types

# **Setting up permissions**

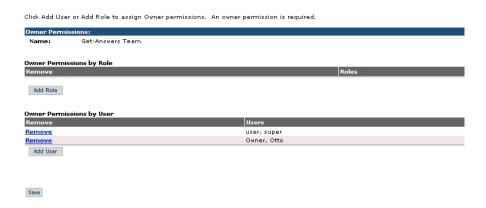
The sample user login "suser," by default, has permission to create the categories, import the documents, create document views, personalize input forms, and personalize edit forms (also known as Workflows).

Note: Permission to create categories and to create document views requires Team Owner permissions in the document teams. Permission to import documents requires Get-Answers Administrator permissions, which are set in Set Security Capabilities. Permission to personalize input forms and personalize edit forms (Workflows) requires Personalization System Maintenance permissions, which are set in Set Security Capabilities.

You may want to give every owner the permission to administer the personalization of forms. Unfortunately, there is not way to prevent one document team owner from overwriting the changes that another document team owner made which have a system-wide effect.

Use the Set Owners Permission page to view and update document ownership team permissions.

#### Get-Answers tab > Manage Document Ownership Team link > Search > select Document Team > Set Owner Permissions



Use the Set Security Capabilities page to update the security capabilities.

#### People > Search > Admin > Person Details > Set Security Capabilities

Please select from the list of available security elements.

Select	Capability	Description
	Assets Management	Manage Assets
	Assets Setup	Manage Assets Setup Details
V	People	Manage People
	Organizations	Manage Organizations
V	Assign Role	Assign Roles to people
✓	People Setup	Manage People Setup Details
	Places	Manage Places
	Places Setup	Manage Places Setup Details
✓	System Maintenance user	Full access to system maintenance and administration activities.
V	Portal	Allow access to the Peregrine Portal
✓	Personalization Sytem Maintenance	Access to the system maintenance and administrative functions
✓	Personalization default	Default capabilities for a Standard User
	Get-Answers Administrator	View all Get-Answers Document Ownership Teams.
✓	Get-Answers Reports	View all Get-Answers Reports.
V	Notification Services Administrator	Notification Services Administrator.
V	Notification Services GUI	Allow a user to view the Notification Services GUI.
V	Update Preferences	Allow a user to view and update their work schedule and device preferences in Notificat
✓	Send Notifications	Allow a user to view the Send Notification activity in Notification Services.
V	View Notifications	Allow a user to view the Inbox and Outbox activities in Notification Services.
V	Workflow administrator	access to admin interface
V	Workflow Template designer	access to the designer interface
굣	Workflow Process	add rights to edit a running process
	Workflow Request	access to the request module
V	Workflow Standard User	basic access to the task list

# Using the extended fields in searching

Copy the text from the rware\_cfg.txt file to the rware.cfg file, following these rules:

- Remove the duplicates.
- Keep the largest of the duplicates if you want the entire field to be searched on.
- Remove fields that you do not want searched on. For example, if you do not want the document's history fields searched, you can remove it from the rware.cfg).

## **Extending the database**

The database is automatically extended during imports or migrations; however, you have to restart the application server for the extensions to the schema to be enabled. (See *Creating schema extensions* on page 329.) The search engine must also be restarted (to make use of the new search fields). The search engine needs to re-index all documents to include the newly imported documents.

## **Creating input and edit forms**

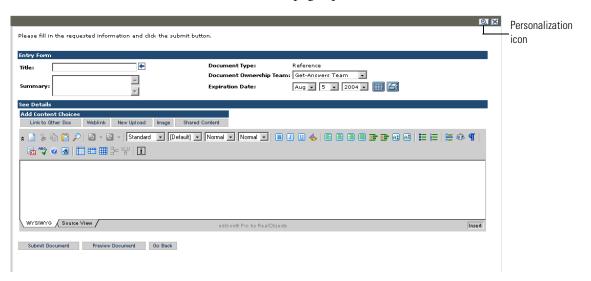
When you migrated the Knowlix documents to Get-Answers, the system created document types for these documents. In order to make these new document types useful for contributing new documents to the system or editing documents that you migrated, you need to create create an input form and and edit form for each document type.

**Note:** See *Chapter 12, Document Types and Views* and *Chapter 5, Personalization* for additional information.

#### To create a new input form and edit form:

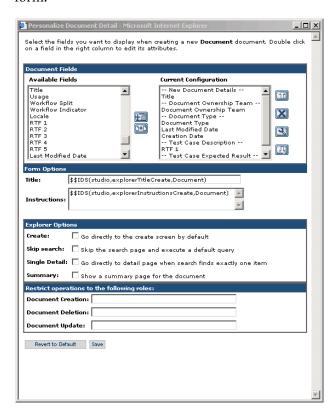
- 1 From the Get-Answers tab, click the Contribute New Document link.
- 2 Select the document type.

The Create New Document page opens.



This page probably does not have the fields that authors may need.

3 Add those fields by selecting the personalization icon (a wrench) to open a personalization window that lists all the fields you can add to your input form.



Use the information gathered from KnowlixAuthor (*Preparing for the conversion from Knowlix* on page 318) to determine which fields you want document authors to see. See *Chapter 5*, *Personalization* for more details on personalizations.

4 Click Save when you complete personalization.

The Create New Document page opens with the new personalization added. Now use this form with the personalization changes you made to create a sample document.

**Note:** You must complete the Document Ownership Team and Document Type fields.

5 Click Submit.

- The document you submitted goes into the workflow (Triage) where you can open it for editing.
- **6** In Workflow, open and accept the triage workflow assignment associated with the sample document that you submitted.
  - You can use the same steps to create the edit form that you used to create the input form. You do not need to use the same fields, or all of the fields that you used in authoring the document, although they are all available. You have to use the Document Ownership Team and the Document Type fields.

**Note:** Some fields are populated automatically, such as date the document was created.

- 7 On most edit forms, you may want to change some of the fields from read only to allow input or make some entries required. For a detailed explanation of these procedures, see in *Chapter 5, Personalization, Configuring field attributes*.
- **8** When you complete all the personalization changes, click **Save** in the Personalization Document Detail window.
  - You should now have a personalized edit form saved, so you can delete the sample document you have been using to create the edit form.
  - The next time you open a document of this type for editing, the document will use all of the personalization changes you made when you created the edit form.

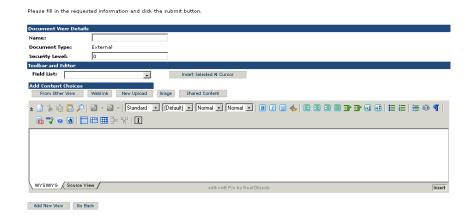
## **Creating views**

You must create a document view so that the documents using that view can be displayed.

#### To create document views:

- 1 Click Manage Document Types.
- 2 Select the document for which you want to add a view.

3 Click the Add link next Document Views.



- 4 Use the field names in the field list to add them to the view. See *Chapter 12*, *Document Types and Views* for adding fields to the document view.
- 5 Click **Add View** to save the new view.

## Removing like-named document types

You should remove the sample doc types supplied with Get-Answers including Error Message Cause, How To, Problem Solution, and Reference document types if you have like named document types from Knowlix.

If users start submitting documents with the sample versions, you will have document type management problems from duplicate types, requiring you to support two versions of every document view, every input form, and every edit form for the document types.

See *Chapter 12*, *Document Types and Views* for information about deleting document types.

## **Creating schema extensions**

Schemas are XML documents that modify the data in the database. Schemas describe the structure of the data and the relationships between the data in the database. The Get-Answers import process provides schema extension files for your data during the import process. These schema extensions are saved in the KmDocument.xml file in the following directory, which you can find in this directory:

#### \WEB-INF\apps\oaagen\schema\extensions\

The schema extension generated by the Import Documents activity defaults the field labels to the name of the field. These are not localized. You have to add \$\$IDS mappings in the schema and string files to localize them.

#### To localize the label of a new field:

- Open the rKmDocument.xml file in this directory: \webapps\oaa\WEB-INF\apps\oaagen\schema\extensions\
- 2 Find the line that begins with <attribute name= , e.g. <attribute name="OperatingSystem" label="OperatingSystem" type="string"/>
- 3 Change the label="OperatingSystem" to label="\$\$IDS(Entities,Entities\_OperatingSystem\_Label)"
- 4 Open the Entities\_en.str file in this directory:
  - \webapps\oaa\WEB-INF\apps\oaagen\
- 5 Add this line alphabetically so it is easily found afterwards.
  - Entities\_OperatingSystem\_Label, "Operating System"
- 6 For each language in the \webapps\oaa\WEB-INF\apps\oaagen\ directory or in a directory below it, add the attribute's label for that language.
  - For example, in the Entities\_de.str file, add this line for the German string: Entities\_OperatingSystem\_Label, "Betriebssystem"
- **7** Repeat this procedure for each field you added.

## Using schema extensions to manually add new fields

If you are not using the import process and need schema extensions follow the procedures described in this section. You can add as many new fields as you want by repeating one line and changing the properties of that line, which these procedure describes how to do. In the first procedure, you change the logical mappings of the fields. In the second procedure, you change the physical mappings.

**Note:** Do not use this procedure if you are migrating Knowlix data. See the section *Converting Knowlix data* on page 318 for more information on Knowlix migration.

#### To change the logical mappings in the Get-Answers schema extension file:

- 1 The schema extensions are saved in the KmDocument.xml file in this director:
  - \WEB-INF\apps\oaagen\schema\extensions\
- 2 Find the line that begins with <attribute name=.

This example shows what the KmDocument.xml schema extension file looks like before you change it. The attribute name line appears in bold text for this example only.

- **3** Copy the line that begins with <attribute name= and paste it below the line.
- 4 In the line you pasted, change the value in quotes to the field you want to add. For example, change "operating system" to "job title".
- **5** Repeat steps 3 and 4 for each field you want to add.
- 6 Save the file.

## To change the physical mappings:

- 1 Open the rKmDocument.xml file in the following directory:
  - \WEB-INF\apps\oaagen\extensions\rome\
- **2** Find the line that begins with <attribute.

This example shows what the rKmDocument.xml document looks like.

```
<schema>
  <documents name="rome">
     <document CallableClass="" CacheType="DEFAULT" string="Title"</pre>
table="KMDOCUMENT" ejb="KmDocument" name="rKmDocument">
  <attribute callmethod="" length="42" field="_null"
                 member="OperatingSystem" name="OperatingSystem" />
     </document>
  </documents>
</schema>
```

- **3** For each field that you added in the KmDocument.xml (physical mappings) document, copy and paste the <attribute line.
- 4 Change this text in the attribute line you have pasted.
  - Change the length= to your preferred length for the field. For example, change length="42" to length="56".
  - Change the **member**= to match the name of the field. For example change, member="OperatingSystem" to member="JobTitle".
  - Change the name= field to match as well. For example, change name="OperatingSystem" to name="JobTitle".

**Important:** For each field you added in the KmDocument.xml schema, make sure you change each of these fields in the rKmDocument.xml schema.

- **5** Save the file.
- **6** If you need to localize the labels for the new fields, see *To localize the label of* a new field: on page 329.

# 12 Document Types and Views

This chapter describes how to work with Document Types and Document Views. The topics covered in this chapter are:

- *Document Types* on page 333
- *Document Views* on page 334
- Using document types to manage documents on page 334

## **Document Types**

Document types are templates for documents in Get-Answers. For example, you create a Document Type called Payroll Error. When there is an error in processing payroll, you want your staff to use the Payroll Error form to write up the problem. In the Payroll Error document type, you add a field called "Error." You want users to describe the error in this field. Then you add a field called "Problem," in which you want users to describe the underlying problem that caused the error. Finally, you create a field called "Solution." Here users add their solution to the problem.

Get-Answers includes several default Document Types. These include How-To, Problem-Solution, and External. These default Document Types provide the basic structure for Document Types that you create. If you later delete your customized Document Types, the default Document Types retain their basic features.

You should use the External Document Type as a template when you need to create a new Document Type not included in default Document Types. Because the External Document Type is intended as a template for other Document Types, it cannot be modified.

## **Document Views**

The Document Views function has two purposes:

- To provide users a way to customize how their information looks in each form.
- To provide a way for administrators to allow users to see only information that their role and permissions allow them to see. This way, users with different permissions can see the same documents, but only those users with certain permissions see sensitive information.

## Using document types to manage documents

This section describes how to manage the documents in your documentation library by effectively using documentation types, input forms, views, and roles. You can add new views to existing document types and then control the access to these views with the role attribute. You can also add new document types to the standard document types provided by the system.

The tasks explained in the section are:

- Adding a view for an existing document type
- Adding a role to a view
- Adding a new document type
- Adding a new input form for a document type

**Important:** You can add document types for users. These forms are templates for users. Users make copies of the document types. For example, a user who uses the document Error Message/Cause is using a *copy* of the document type Error Message/Cause to record information. When you add document types, you must personalize (customize) them in three places before they can run in Get-Answers. You must personalize the Authoring, Workflow and Preview aspects of the document type. This section explains how to add and personalize new document types. To add document types, you must log in with a user id that has both Admin and Owner rights so you can access all modules required in this procedure.

## Adding a view to a document type

You can add a document view to an existing document type to include more information about the document or to limit the amount of information that a user may have to provide when adding a new document. Whenever you create a new document view, you must also select the role or roles allowed to use the new view.

#### To create a new document view:

- 1 Log in to Get-Answers.
- **2** From the Peregrine Portal, click **Get-Answers** tab.
- 3 In the Activity menu, click Manage Document Types. A list of document types appears.



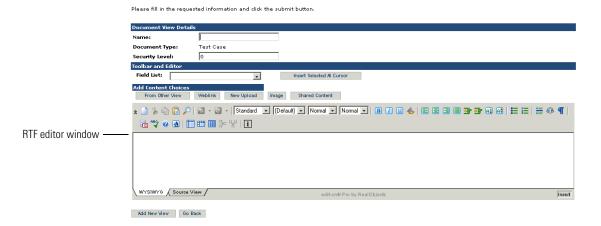
4 Click document type you are adding a view to.

The Document Type Details window opens.



- **5** Enter a name for the view, for example, Test Case.
- **6** Continuing with the example, enter testcase in Storage Value as one word with no spaces. Storage Value is the external representation for the particular string name (the view name) you are creating.
- **7** Enter a description of the example, such as, "This is a sample document type for QA."
- 8 Next to Document Views, click **Add**.

The Create New Document View page opens with Document View Details section, the Toolbar and Editor, and Add Content Choices sections available so that you can now begin adding the content for your new view.



- **9** Enter a name for the view, for example "Default Test Case."
- 10 Set the Security Level. Zero (0) is the highest security and 0 is reserved for the most secure view. In this example, use 10 because this a default view which will be for everyone.
- 11 To insert a field in the view, position your cursor in the edit window (RTF editor window) to where you want the field to appear on the form and select the field name from the Fields List drop-down list. Click Insert Selected At Cursor.

This is a list of standard fields available.

Field Name	Description
Author	The person responsible for the content and maintenance of the document; usually a Document Team Owner.
Author Name	The person who originally submitted the (legacy) document; a string of characters and not a reference to a person in the database.
Checked Out By	Not presently used; available for customer use.
Component	A carryover from Tivoli Service Desk; available for customer use.
Creation Date	The date that document was added to the system, e.g., 2003-5-11.
Date Document Last Modified	Not used.
Document Ownership Team	The team that owns this document.
Document Type	Type of document such as 'How to'; associated with a document ownership team and with a set of views to format the document content.
Expiration Date	Type of document such as 'How to'; associated with a document ownership team and with a set of views to format the document content.
Expiration Date	The date that document is considered out-of-date; used for reporting purposes; generally one year after doc was added to the system, e.g., 2004-9-19.
File Name	The name of physical file.

File Size The size of file in bytes, usually displayed in KB or

MB.

Flex0 to Flex24 These are 50-character string fields in the database

that are configurable by the customer.

FlexDate0 to FlexDate4 These are datetime fields in the database that are

configurable by the customer.

Item A carryover from Tivoli Service Desk; available for

customer use.

changed, e.g., 2003-9-19.

Legacy ID The Id / Identification number of the document in

the legacy system.

Locale The regional language associated with the

document, e.g., French, German, etc.

Method A carryover from Tivoli Service Desk; available for

customer use.

Published Published status of the document, either

'Published' or 'WorkingCopy.'

document, the id of the published document,

otherwise zero.

RTF 1 to RTF 5 These are the rich-text fields in the document.

RTF 1 is the topmost and RTF 2 is the second, etc.

Select 1 to Select 5 These are customer-configurable sets of values

that are used in up to 5 drop-down boxes.

Summary Up to 1024 characters that describe the document

contents.

System A carryover from Tivoli Service Desk; available for

customer use.

Title The title of the document (up to 128 characters).

Usage A numeric value that is incremented when a

document receives a 'Useful' rating and decremented for a 'not useful' rating.

Unique ID This is generated by Get-Answers and used

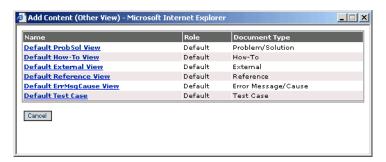
internally.

Unique Identifier This is generated by OAA Bizdoc and used

internally.

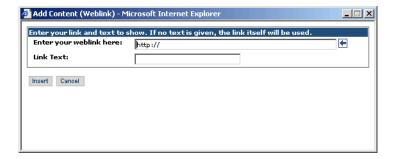
- 12 You can use the formatting features of the editing tool to format the appearance of the field label and position in the form. See the Get-Answers 4-1 User's Guide for more information about the edit-on Pro features for formatting text.
- 13 Continue adding fields on form using Field List drop-down and Insert Selected At Cursor.
- 14 You can also use the buttons in Add Content Choices to add additional content to the new document view. The buttons are:
  - From Other View use this button to add content from another view. The content is added at the current position of the cursor. This is very useful for modifying an existing document view.

When you click From Other View, the Add Content (Other View) window opens.



The view you selected is inserted into the view you are adding.

• Weblink - use this button to add a link (href) to another document. When you click **Weblink**, the Add Content (Weblink) opens.



Type the URL for the link, a name for the link, and click **Insert**.

This creates a link in the new view you are adding.

New Upload - use this button to add an external attachment. The attachment is usually a Word document, txt file, PDF file or some other type of external document. Because this document is an attachment, it is not included in the index and does not appear in any search results.

When you click New Upload, the Upload new content window opens.



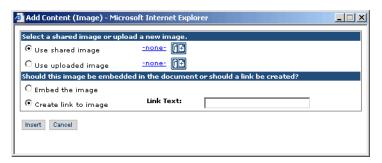
You can create two different types of documents:

a document created externally, which opens a browse window where you can enter the path for the external document (non-image).

or an RTF document, which you create at the time you are doing the upload using the edit-on Pro editor in the pop-up window that appears when you select Rich text subdocument and click the icon on the right.

■ Image - use this button to add an image to the document view. The image can be either a shared image or embedded in the document. A shared image is one that has already been uploaded and is usually used by more than one document view.

When you click Image, the Add Content (Image) window opens.



You select either to use a shared image (one already uploaded) or to upload and image. Click the appropriate icon to open a browse window to specify the path for the location of the image.

You also select either to embed the image in the document view or put a link to the image in the document view.

- Shared Content use this button to add content that has already been uploaded to the database, for example, a PDF file.
  - When you click **Shared Content**, the Add Content (Shared Content) windows opens so that you can select the content you want to share.
- 15 Click Add New View to save your changes and then Submit Changes.

## Adding a role to a document view

You next need to associate roles with the view. This allows users who are assigned to the role to use the new document type view you created. This example uses the Default Role (since most all users belong to the Default Role) as an example of how to add a role to a document type view.

#### To add a role to a document type view:

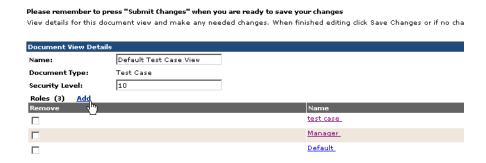
- 1 From the Get-Answers tab, click Manage Document Types.
  - The Document Type Edit window opens.
- **2** From the list, click the name of the view, for example, Default Test Case View.
  - The Document View Details window opens.
- 3 Click Add next to Roles.
  - A Roles search window opens.
- 4 Click the search icon (binoculars).
  - The Lookup Roles window opens.
- 5 Enter the search parameters or just click Search.

The Lists of Roles window opens.



- 6 In the list, click the role you are adding to the view.
  The Roles window opens with the role you selected listed.
- 7 Click OK.

The Document View Details window opens with the role you selected listed in the Roles section.



You can use the document view you created to contribute a new document or view documents in the system.

## Adding a new document type

Get-Answers comes with a set of default document types, but you can add additional document types using the Get-Answers tab.

## To create a new document type:

1 Log in to Get-Answers.

- **2** From the Peregrine Portal, click **Get-Answers** tab.
- 3 Click Manage Document Types link.

A list of document types appears.



4 Click New.

The Create Document Type page opens.

Please fill in the requested information and dick the submit button.

Create Document Type		
Name:	•	
Storage Value:	€	
Description:		
Document Views Add		
Remove	<u>Name</u>	
Submit Go Back		

- **5** Enter a name for the document type, for example, Technical Publications.
- 6 Continuing with the example, enter technical publications in Storage Value as one word with no spaces.
- 7 Enter a description of the example, such as, "This is a sample document type for Technical Publications."

You now need to add a document view to the document type in order for the document type to be useful.

## Adding an input and edit form

You must create an input for users (authors) so that they are able to contribute documents of various types. The systems comes with a set of document types which are be used to contribute a new document, or you can add additional input forms. After you have created a new input form, you can use the form to create an edit form for the document. Documents are created (authored) from the Get-Answers tab and edited from the Workflows tab. When you are creating input and edit forms, you use personalization extensively. You should review and be familiar with the information in *Chapter 5, Personalization* before you been to create new input and edit forms.

#### This section explains:

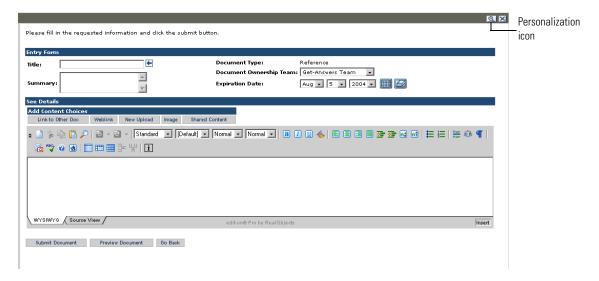
- Using Contribute New Document to create a new input form
- Creating a test document to use to create a new edit form (Workflow)

#### To create a new input form:

- 1 From the Get-Answers tab, click the Contribute New Document link. A list of available document types opens.
- **2** Select a document type to use as a base document for a new input form.

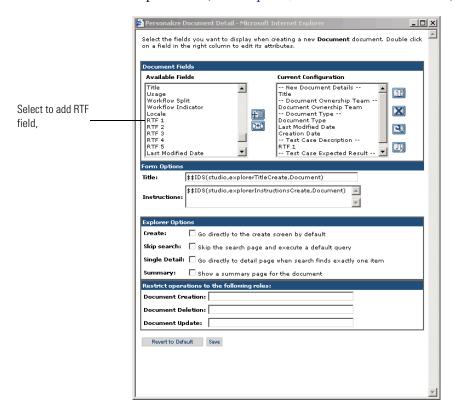
**Note:** You should select a document type that is most similar to the input form you are creating and has the appropriate roles associated with it.

The Create New Document page opens.



This form may not have all the fields that authors need.

Add the additional fields by selecting the personalization icon (a wrench) to open a personalization window that lists all the fields you can add to your input form. (See *Chapter 5*, *Personalization* for details.)



- 4 For example, you may wish to add an edit window for RTF editing using edit-on Pro. You would select RTF1 and move it to Current Configuration.
- 5 Click Save when you complete personalization. The Create New Document page opens with the new personalization added. Now use this form with the personalization changes you made to create a sample document.

## To create a sample document using the input form:

- 1 On the form you personalized, type the title of the sample document.
- **2** Enter any additional information required by the form.
- 3 Click Submit.

The document you submitted goes into the workflow (Triage) where you can open it for editing.

#### To create an edit form for the input form:

1 From the Workflow tab, select the sample form you submitted from your list of My messages.

The Task Details page opens.

2 Click Accept Group Assignment.

The Task Details page opens.

Open and accept the triage workflow assignment associated with the sample document that you submitted. You can use the same steps to create the edit form that you used to create the input form. You do not need to use the same fields, or all of the fields that you used in authoring the document, although they are all available. You have to use the Document Ownership Team and the Document Type fields.

**Note:** Some fields are populated automatically, such as date the document was created.

- 3 On most edit forms, you may want to change some of the fields from read only to allow input or make some entries required. For a detailed explanation of these procedures, see in *Chapter 5, Personalization, Configuring field attributes*.
- 4 Click Save to save you personalization changes and close the window.
- 5 Use Preview Document to view your changes.
- **6** Use the personalization icon (wrench) to make any additional changes.
- **7** When all the changes are made, select Delete this document from the system.
- **8** Click Save Changes and Perform Action.

The system deletes the sample document, but the personalization changes you made for editing documents for this document type remain so that the next time you open a document of this type it will appear in the edit form you created.

# Glossary

This glossary contains general terms used when describing Get-Answers, OAA platform, and Workflow.

**Activity** A task or set of tasks that forms one logical step within the process definition.

An activity can be a manual activity or an automated activity.

**Activity** A single instance of an activity within a process instance. A process instance

**instance** can include multiple activity instances.

An activity that has been started is an activity instance.

**Adapter** Provides a connection between the back-end database and the Web

application, allowing data to pass back and forth from the database to the

Web browser.

**AND-Join** A point within the workflow where two or more parallel activities are joined

and the next logical activity is executed (see *Parallel routing*).

**AND-Split** A point within the workflow where a sequential route splits so that two or

more parallel activities are formed for independent, simultaneous processing (see *Parallel routing*). An AND-Join is used to join the parallel activities when

their processing is complete.

**Application** Processes data from a Web application database and delivers it to the Web

server server.

#### **Archway**

A Java servlet that listens to HTTP requests from clients and foreign servers, routes the requests to an appropriate server, and returns data or displayable documents. The requests supported by Archway can vary, but they fundamentally consist of queries, data updates, and system events. Archway processes HTTP requests and formats them into messages understood by the Get-Answers processing layer. The resulting messages are ultimately dispatched to a data store adapter which produces an XML formatted result set.

#### Authoring

Authoring is the ability to create new documents and edit the content using an RTF editor.

#### **Audit data**

An historical record of the progress of process instances and activity instances.

Get-Answers collects the following information for process instances and activity instances:

Process Instance	Activity Instance
Date Started	Date Assigned
Date Ended	Date Due
	Date Ended

## Automated activity

An activity that is performed by a computer, without user intervention.

## Business process

A set of linked activities that complete a business objective. A business process is defined in a process definition that can include both automated and manual activities.

## **Capabilities**

Capabilities are the tasks that Members, Submitters, Readers, Reviewers, Editors, and Owners can perform. There are seven capabilities including read, create, update, revert, retire, publish, and transfer.

## Component template

Defines a set of specific activities. A component template can be added to a workflow template.

## **Deadline**

A time-based scheduling constraint where the work item for an activity must be completed by a specified time.

**categories** Categories contain published documents. Each category is managed by one

Ownership Team.

**ECMAScript** Server-side scripting language. Used to write scripts for Get-Answers.

**Editor** Editor is one of the four Document Ownership Team permissions. An editor

has read, create, and update capabilities for any document owned by the Ownership Team. An Editor also has special responsibilities in the editorial

workflow.

**Editorial** The Get-Answers Editorial Workflow is used to edit and review an

**workflow** unpublished (working copy) document and its metadata.

**Escalation** A procedure that is invoked when a specific constraint or condition is not

met. An escalation can be automated or manual and generally involves a

higher level of authority (see Organization- al Role).

**Event** An occurrence that causes the workflow management software to take one or

more actions. An event notifies the workflow engine of an internal or

external action.

**External** A document created outside of Get-Answers. Examples include MS Office

**document** documents, PDF documents, and HTML documents.

**HTML** Hypertext Markup Language. A language used to compose Web pages, which

can be read and displayed by a Web browser.

HTTP Hypertext Transfer Protocol. The communications protocol used to connect

to Web servers. Sends HTML pages to the Web browser to be read and

displayed. HTTPS can be used to provide extra data level security.

**Iteration** A repetitive execution of one or more activities until a specified condition is

met.

**JAAS** Java Authentication and Authorization Service: JAAS is used by Get-Answers

to authenticate users. The set of services against which a user must be authenticated can be configured, and each service can be defined as REQUIRED, OPTIONAL, REQUISITE, or SUFFICIENT through login

modules.

Java Run-Time Environment A JRE is required to run Java programs. It consists of the Java Virtual Machine, the Java platform core classes, and supporting files.

**JSP** 

Java Server Page. Allows separation of page content from the design and display of a page. HTML tags with embedded Java source code are executed by the Web or application server. JSP technology is an extension of Java servlet technology.

Manual activity

An activity that requires user resources for performance of the required tasks associated with the activity.

Member

Member is one of the two category permissions. A member has read access to any document published in the category.

Metadata

Metadata consists of information stored about each document, such as file name, title, file size, document type, version number, creation date, and editorial status.

OAA platform

The software platform that the Peregrine Get-It products use. These products are Get-Answers, Get-Resources, and Get-Services. This platform provides features and functionality common to the Get-It employee self-service products. The OAA Platform is a software product included with any or all of the Get-It products and is not sold without them.

OR-Join

A point within the workflow where two or more alternative activity branches are joined into a single activity.

**OR-Split** 

A point within the workflow where a sequential route splits based on a decision upon which branch to take. An OR-Split is conditional and the branch to the next activity is determined by the value returned.

Organizational Role A group of workflow participants having a specific set of attributes, qualifications, and skills. The participants within the group can perform work items that require a participant who has that set of attributes.

Owner

Owner is one of the four Document Ownership Team permissions. An owner has read, create, update, revert, retire, publish, and transfer capabilities for any document owned by the Ownership Team. An Owner also has special responsibilities in the editorial and triage workflows.

**Ownership** Ownership Teams manage documents. There are four permissions

teams associated with an Ownership Team. They include Reader, Editor, Owner,

and Reviewer.

**Parallel** A segment of a process instance where two or more activity instances execute

routing in parallel. Parallel routing normally is created with an AND-Split and

concludes with an AND-Join.

**Peregrine** The first screen displayed when starting a Peregrine Web application.

**Portal** Provides a login screen and access to the modules that make up the

application.

**Process** A set of process activities designed within the process definition according to

the requirements of a business process.

**Process** A process definition represents a business process and consists of activities

**definition** where the process tasks are defined.

A process definition includes information about the activities and workflow users. Both manual activities and automated activities can be included in the

process definition.

**Process** A single instance of a process as defined by the process definition.

instance

A process that has been started is a process instance.

**Process role** A mechanism that associates workflow participants with workflow activities.

The role defines how the user participates in a specific process or activity.

**Process state** A representation of the status of a process instance. The Get-Answers

workflow uses the following process states:

Running—the process instance is running and one or more activities have

started.

Completed—the process instance has successfully completed all activities.

Error—the process instance has encountered an error and stopped.

**Reader** Reader is one of the four Document Ownership Team permissions. A reader

has read access to any document owned by the team. Readers play no role in

the editorial or triage workflows. Readers can author documents.

**Reviewer** Reviewer is one of the four Document Ownership Team permissions. A

reviewer can read any document owned by the Ownership Team. A Reviewer

also has special responsibilities in the editorial workflow.

**Roles** Roles consist of a group of users. Permissions are given to roles and/or

individual users.

**Sequential** A segment of a process instance where several activity instances are executed

routing in sequence.

**Servlet** A platform-independent Java application component that is used by the

system as needed to perform server-side processing (for example, to access a

database).

**Submitter** Submitter is one of the two category permissions. A submitter has read access

to any document published in the category, and can contribute new

documents to the category.

**Triage** The Get-Answers Triage Workflow is used to examine newly submitted documents that have never been published before, in order to determine if

the document should be further reviewed in an Editorial Workflow, published immediately, transferred to a different Document Team, or

deleted.

**Web** An application that appears in a Web browser.

application

**Web server** Reads data directly from a Web application or from the application server

and converts it to a form that can be displayed by a Web browser.

**Work item** The work to be processed by a workflow user, as defined in the associated

activity. Work items for a user or group of users are accessed through the

worklist.

**Workflow** The automation of a business process where tasks are passed from one user

to another, as defined by the process definition.

Get-Answers workflow consists of the lifestyle stages of each document. Up to three copies of a document can exist at any time. They include the published copy, the working copy, and the copy currently under revision.

Workflow engine

A software service or "engine" that provides the run time execution environment for a process instance.

The workflow engine interprets the process definition, creates process instances and manages their execution, and navigates activities and creates work items for their processing.

Workflow participant

A user that performs the work items assigned through the worklist. Each work item is represented by a workflow activity.

**Working copy** 

Working Copy is a version of the published document in an editorial status.

Worklist

A list of work items associated with a specific user or group of users.

**XML** 

Extensible Markup Language: A documentation meta-language that allows you to author self-describing data documents, which can then be formatted with a style sheet for display in a Web browser or exchanged with foreign systems. Unlike HTML, you create your own XML tags and define their meaning to suit the application.

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