



# Service Registry 3.1 User's Guide



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# Preface

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The *Service Registry 3.1 User's Guide* describes how to use the Web Console utility provided with Service Registry (“the Registry”). The Web Console allows users to search the Registry for data and to publish data to the Registry. The *User's Guide* also provides troubleshooting information.

Service Registry is an ebXML Registry: a federated registry and repository that manages all types of electronic content described by standard and extensible metadata. It provides federated, secure information management of Service Oriented Architecture (SOA) and other content and metadata. It supports the ebXML Registry 3.0 and UDDI 3.0 registry protocols.

## Who Should Use This Book

The *User's Guide* is intended for administrators and end users who search the Registry and publish data to the Registry. This guide assumes you are familiar with the basic concepts of the ebXML Registry and Repository specifications.

## Before You Read This Book

You should be familiar with the basic concepts of these specifications:

- *ebXML Registry Information Model Version 3.0*
- *ebXML Registry Services and Protocols Version 3.0*

Service Registry is a component of Sun Java™ Enterprise System (“Java ES”), a software infrastructure that supports enterprise applications distributed across a network or Internet environment. You should be familiar with the Java ES documentation at <http://docs.sun.com/coll/1286.2>.

## How This Book Is Organized

The contents of this book are as follows:

[Chapter 1](#) describes the main elements of the Web Console and describes the preliminary steps to follow before you search the Registry and publish data to the Registry.

[Chapter 2](#) describes how to search the registry.

[Chapter 3](#) describes how to create objects and publish them to the Registry.

[Chapter 4](#) describes solutions to some problems that you can encounter when using the Web Console.

## Service Registry Documentation Set

The Service Registry documentation set is available at <http://docs.sun.com/coll/1314.2>. To learn about Service Registry, refer to the books listed in the following table.

TABLE P-1 Service Registry Documentation

Document Title	Contents
<i>Service Registry 3.1 Release Notes</i>	Contains the latest information about Service Registry, including known problems.
<i>Service Registry 3.1 Administration Guide</i>	Describes how to configure Service Registry after installation and how to use the administration tool provided with the Registry. It also describes how to perform other administrative tasks.
<i>Service Registry 3.1 User's Guide</i>	Describes how to use the Service Registry Web Console to search Service Registry and to publish data to it.
<i>Service Registry 3.1 Developer's Guide</i>	Describes how to use the Java API for XML Registries (JAXR) to search Service Registry and to publish data to it.

## Related Books

When you install Service Registry, it is deployed to Sun Java System Application Server. For information about administering Application Server, refer to the *Sun Java System Application Server Enterprise Edition 8.2 Administration Guide*.

The Java ES documentation set describes deployment planning and system installation. The URL for system documentation is <http://docs.sun.com/coll/1286.2>. For an introduction to Java ES, refer to the books in the order in which they are listed in the following table.

TABLE P-2 Java Enterprise System Documentation

Document Title	Contents
<i>Sun Java Enterprise System 5 Release Notes for UNIX</i>	Contains the latest information about Java ES, including known problems. In addition, components have their own release notes listed in the Release Notes Collection ( <a href="http://docs.sun.com/coll/1315.2">http://docs.sun.com/coll/1315.2</a> ).
<i>Sun Java Enterprise System 5 Release Notes for Microsoft Windows</i>	
<i>Sun Java Enterprise System 5 Technical Overview</i>	Introduces the technical and conceptual foundations of Java ES. Describes components, the architecture, processes, and features.
<i>Sun Java Enterprise System Deployment Planning Guide</i>	Provides an introduction to planning and designing enterprise deployment solutions based on Java ES. Presents basic concepts and principles of deployment planning and design, discusses the solution life cycle, and provides high-level examples and strategies to use when planning solutions based on Java ES.
<i>Sun Java Enterprise System 5 Installation Planning Guide</i>	Helps you develop the implementation specifications for the hardware, operating system, and network aspects of your Java ES deployment. Describes issues such as component dependencies to address in your installation and configuration plan.
<i>Sun Java Enterprise System 5 Installation Guide for UNIX</i>	Guides you through the process of installing Java ES. Also shows how to configure components after installation, and verify that they function properly.
<i>Sun Java Enterprise System 5 Installation Guide for Microsoft Windows</i>	
<i>Sun Java Enterprise System 5 Installation Reference for UNIX</i>	Gives additional information about configuration parameters, provides worksheets to use in your configuration planning, and lists reference material such as default directories and port numbers on the Solaris Operating System and Linux operating environment.
<i>Sun Java Enterprise System 5 Upgrade Guide for UNIX</i>	Provides instructions for upgrading to Java ES 5 from previously installed versions.
<i>Sun Java Enterprise System 5 Upgrade Guide for Microsoft Windows</i>	
<i>Sun Java Enterprise System 5 Monitoring Guide</i>	Gives instructions for setting up the Monitoring Framework for each product component and using the Monitoring Console to view real-time data and create monitoring rules.
<i>Sun Java Enterprise System Glossary</i>	Defines terms that are used in Java ES documentation.

The URL for all documentation about Java ES and its components is <http://docs.sun.com/prod/entsys.5>.

## Default Paths and File Names

The following table describes the default paths and file names that are used in this book.

TABLE P-3 Default Paths and File Names

Placeholder	Description	Default Value
<i>ServiceRegistry-base</i>	Represents the base installation directory for Service Registry.	Solaris OS: /opt/SUNWsrvc-registry Linux and HP-UX systems: /opt/sun/srvc-registry
<i>RegistryDomain-base</i>	Represents the directory where the Application Server domain for Service Registry is located and where the Service Registry database is located.	Solaris OS: /var/opt/SUNWsrvc-registry Linux and HP-UX systems: /var/opt/sun/srvc-registry

## Typographic Conventions

The following table describes the typographic changes that are used in this book.

TABLE P-4 Typographic Conventions

Typeface	Meaning	Example
AaBbCc123	The names of commands, files, and directories, and onscreen computer output	Edit your <code>.login</code> file. Use <code>ls -a</code> to list all files. <code>machine_name% you have mail.</code>
<b>AaBbCc123</b>	What you type, contrasted with onscreen computer output	<code>machine_name% su</code> Password:
<i>AaBbCc123</i>	A placeholder to be replaced with a real name or value	The command to remove a file is <code>rm filename</code> .
<i>AaBbCc123</i>	Book titles, new terms, and terms to be emphasized (note that some emphasized items appear bold online)	Read Chapter 6 in the <i>User's Guide</i> . <i>A cache</i> is a copy that is stored locally. Do <i>not</i> save the file.

## Shell Prompts in Command Examples

The following table shows default system prompts and superuser prompts.

TABLE P-5 Shell Prompts

Shell	Prompt
C shell on UNIX and Linux systems	machine_name%
C shell superuser on UNIX and Linux systems	machine_name#
Bourne shell and Korn shell on UNIX and Linux systems	\$
Bourne shell and Korn shell superuser on UNIX and Linux systems	#
Microsoft Windows command line	C:\

## Symbol Conventions

The following table explains symbols that might be used in this book.

TABLE P-6 Symbol Conventions

Symbol	Description	Example	Meaning
[ ]	Contains optional arguments and command options.	ls [-l]	The -l option is not required.
{   }	Contains a set of choices for a required command option.	-d {y n}	The -d option requires that you use either the y argument or the n argument.
\${ }	Indicates a variable reference.	\${com.sun.javaRoot}	References the value of the com.sun.javaRoot variable.
-	Joins simultaneous multiple keystrokes.	Control-A	Press the Control key while you press the A key.
+	Joins consecutive multiple keystrokes.	Ctrl+A+N	Press the Control key, release it, and then press the subsequent keys.
→	Indicates menu item selection in a graphical user interface.	File → New → Templates	From the File menu, choose New. From the New submenu, choose Templates.

## Documentation, Support, and Training

The Sun web site provides information about the following additional resources:

- Documentation (<http://www.sun.com/documentation/>)
- Support (<http://www.sun.com/support/>)
- Training (<http://www.sun.com/training/>)

## Searching Sun Product Documentation

Besides searching Sun product documentation from the [docs.sun.com](http://docs.sun.com)<sup>SM</sup> web site, you can use a search engine by typing the following syntax in the search field:

```
search-term site:docs.sun.com
```

For example, to search for “broker,” type the following:

```
broker site:docs.sun.com
```

To include other Sun web sites in your search (for example, [java.sun.com](http://java.sun.com), [www.sun.com](http://www.sun.com), and [developers.sun.com](http://developers.sun.com)), use `sun.com` in place of `docs.sun.com` in the search field.

## Third-Party Web Site References

Third-party URLs are referenced in this document and provide additional, related information.

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# Getting Started with the Web Console

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The Web Console is a web-based user interface that allows you to search the Registry and to publish content to the Registry and Repository. This chapter describes the preliminary steps to follow before you can perform these operations.

- “Starting the Web Console” on page 13
- “Changing the Default Language” on page 14
- “Enabling Versioning of Registry Content” on page 16
- “Creating a User Account” on page 16

## Starting the Web Console

To start the Web Console, type the following URL into a browser:

```
http://hostname:port/soar/
```

Here is an example:

```
http://localhost:6480/soar/
```

If the Registry is installed on your system, the *hostname* is `localhost`. If the Registry is not installed on your system, use the name of the system where the Registry is installed. The *port* value is usually 6480 unless there is a port conflict.

The Web Console has the following main sections:

- Top banner, where you can do the following:
  - Go to the Welcome page of the Web Console
  - Access the Registry documentation or online help
  - Log in and log out
  - Reset the locale (see “Changing the Default Language for Labels and Messages” on page 14)

- End the current session
- Set versioning for Registry content (see “[Enabling Versioning of Registry Content](#)” on page 16)
- Set the content language (see “[Changing the Default Language for Registry Content](#)” on page 15)
- Menu area on the left side of the screen, which contains three tabs:
  - Tasks
  - Search
  - Explore
- Main area, which contains either the Welcome page or a page resulting from a task, search, or explore action

When you first access the Web Console, you see the Welcome page, and the Tasks tab is visible. Click the Home link in the banner area to return to this page and tab.

Click Documentation to view the Service Registry documentation at <http://docs.sun.com/coll/1314.2> in a new browser window.

Click User Guide to view the online help for the Web Console in a new browser window.

You use the Login button to log in to the Web Console, but you do not perform this task until you have created a user account. After you log in, the Login button is grayed out, and the End Session button changes to a Logout button.

Click the End Session button to exit the Web Console when you are not logged in.

If you click either End Session or Logout, you go to a Session Ended page that allows you to return to the Registry and start a new session.

## Changing the Default Language

You can change the default language for the display of two kinds of information:

- Web Console labels and messages
- Registry content

## Changing the Default Language for Labels and Messages

The Web Console’s labels and messages can be displayed in the languages listed in [Table 1–1](#).

TABLE 1-1 Languages Supported by the Web Console

Language	Code
Simplified Chinese (China)	zh_CN
Traditional Chinese (Taiwan)	zh_TW
English (United States)	en
French	fr
German	de
Japanese	ja
Korean	ko
Spanish	es

## ▼ To Change the Language for Labels and Messages

- 1 Add the language to your browser language preferences by following the instructions for the browser.**

For most browsers, you can find the language settings in the General area of the Internet Options, Options, or Preferences dialog box.

- 2 Make the language your preferred language by placing it first in the list of languages.**
- 3 Click the Reset Locale button.**

The labels appear in the appropriate language.

## Changing the Default Language for Registry Content

You can publish content to the registry in any of the languages that appear in the Content Language drop-down list in the top banner area. The default is the language setting for your browser.

To change the language from the default, choose the language from the Content Language drop-down list.

## Enabling Versioning of Registry Content

By default, versioning of registry objects is turned off. All objects have the version number 1.1. If you want an object to obtain a new version number when you modify it, select the Versioning ON checkbox. Selection of this checkbox has no effect unless an administrator has performed the task described in “Enabling Versioning of Registry Objects” in *Service Registry 3.1 Administration Guide*.

## Creating a User Account

You can browse the public content of the Registry without logging in to the Registry. However, to gain read access to private objects and write access to public objects, you must have a user account with the Registry. After you create a user account, you can perform secure operations such as publishing, modifying, and removing objects.

Creating a user account involves the following general steps:

1. Fill out a new user's details form.
2. Associate a set of credentials with the user account. You can obtain these credentials in either of two ways:
  - The Registry can generate credentials for you. This is the simpler way to obtain credentials.
  - If you have a certificate issued by a third-party certificate authority, you can use this certificate to obtain credentials. Before you can use the certificate, an administrator must install the third-party root certificates into the Application Server domain for the Registry. See “To Add Root Certificates to the Trusted Certificates in the Registry Domain” in *Service Registry 3.1 Administration Guide* for details.

To create a user account, perform the following tasks:

- [“To Start the User Registration Wizard” on page 16](#)
- Either [“To Obtain a Registry-Generated Certificate” on page 17](#) or [“To Use a Third-Party Certificate” on page 18](#)
- Either [“To Load the Certificate into the Mozilla or Firefox Browser” on page 19](#) or [“To Load the Certificate into the Internet Explorer Browser” on page 20](#)
- [“To Log In to the Registry” on page 21](#)
- [“Authenticating to the Registry” on page 21](#)

### ▼ To Start the User Registration Wizard

- 1 Click the **Tasks** tab in the left menu area, then click **Create User Account**.
- 2 Click the **Start Registration Wizard** button.

**3 Read the instructions under Step 1: Requirements and click Next.****4 Fill out the New User's Details form.**

You must enter data in the following fields:

- First Name
- Last Name
- City
- State or Province
- Country (limited to two characters; use country code)

**5 Click Next.**

The User Authentication Details page appears.

**6 On the User Authentication Details page, select one of the following radio buttons:**

- Select Generate Key Pair and Download PKCS12 KeyStore (the default) if you want the Registry to create a certificate for you. See [“To Obtain a Registry-Generated Certificate” on page 17](#) for details about this task.
- Select Upload X.509 Certificate (DER) if you want to use an existing third-party certificate. See [“To Use a Third-Party Certificate” on page 18](#) for details about this task.

## ▼ To Obtain a Registry-Generated Certificate

Follow these steps if you selected the Generate Key Pair and Download PKCS12 KeyStore radio button on the User Authentication Details page.

**1 On the User Authentication Details page, type a user name in the Alias text field.****2 Type a password in the Password and Password (repeat) text fields.**

The password must be at least 6 characters in length.

**3 Type values in the following text fields:**

- Organizational Unit
- Organization

The Name field contains the name that you specified as the Last Name in the New User's Details form. The City, State or Province, and Country fields also contain the values you specified in the New User's Details form. These fields are not editable. If you need to make corrections in these fields, click Previous and make the corrections in the New User's Details form.

All fields are required.

**4 Click Next.**

A page labeled Step 4: Load Key to Web browser appears, with the message “New user successfully registered.”

**5 Click Download.**

**6 In the dialog box, choose the option that allows you to save the generated certificate to disk. In the file chooser dialog, choose a directory and name for the file.**

The file must have the suffix .p12.

The default action is to save the certificate in your home directory, in a file that is named generated-key.p12.

**7 Import the generated certificate into your browser.**

See [“To Load the Certificate into the Mozilla or Firefox Browser”](#) on page 19 or [“To Load the Certificate into the Internet Explorer Browser”](#) on page 20 for details.

## ▼ **To Use a Third-Party Certificate**

Follow these steps if you selected the Upload X.509 Certificate (DER) radio button on the User Authentication Details page. These steps place the certificate in the server keystore for the Registry and load the certificate into the browser.

**Before You Begin** The third-party certificate must be in X.509 format. Typically, the certificate is in a file with the suffix .cer.

**1 On the User Authentication Details page, click the Choose Certificate File button.**

**2 In the File Upload dialog box, click the Browse button to locate the file to upload, then click Upload File.**

**3 Click OK.**

The name of the file appears on the User Authentication Details page next to the Choose Certificate File button.

**4 Click Next.**

**5 On the Step 4: Load Key to Web browser page, follow the instructions to import the certificate into your browser if it is not already there.**

See [“To Load the Certificate into the Mozilla or Firefox Browser”](#) on page 19 or [“To Load the Certificate into the Internet Explorer Browser”](#) on page 20 for details.

## ▼ To Load the Certificate into the Mozilla or Firefox Browser

**1** Navigate to the certificate manager window. Depending on your version of Mozilla or Firefox, the path to this window could be any of the following:

- Edit→Preferences→Privacy & Security→Certificates→Manage Certificates
- Edit→Preferences→Advanced→Security→View Certificates
- Tools→Options→Advanced→Certificates→Manage Certificates
- Tools→Options→Advanced→Encryption→View Certificates

The certificate manager window appears, open to the Your Certificates tab.

**2** In Mozilla or more recent versions of Firefox, click the Manage Certificates button. In some earlier versions of Firefox, click View Certificates.

**3** Click the Import button.

**4** In the File Name to Restore file chooser dialog, select the .p12 certificate file, then click Open.

**5** In the Prompt dialog, type an account password for the Master Password for the Software Security Device.

This password is specific to your browser account and is assigned by the browser profile owner. A common convention is to use the same password as the login account on the client machine.

**6** In the Password Entry dialog, type the certificate password.

This password is used to protect the client certificate. If you are using a registry-generated certificate, type the password that you specified on the User Authentication Details page.

An Alert dialog with the message: “Successfully restored your security certificate(s) and private key(s)” appears.

**7** Click OK.

**8** Close the Certificate Manager and Preferences/Options dialogs.

**Next Steps** After you import the certificate, you are ready to log in to the registry. See [“To Log In to the Registry” on page 21](#) for details.

## ▼ To Load the Certificate into the Internet Explorer Browser

- 1 Choose Internet Options from the Tools menu.
- 2 Click the Content tab.
- 3 Click Certificates.
- 4 Click Import to open the Certificate Import Wizard.
- 5 In the Certificate Import Wizard, click Next.
- 6 On the File to Import page, click Browse and locate the . p12 file, then click Next.
- 7 On the Password page, do the following:
  - a. Type the password that you specified for the certificate.
  - b. Select the Mark the Key as Exportable checkbox.
  - c. Do not select the Enable Strong Private Key Protection checkbox.
  - d. Click Next.
- 8 On the Certificate Store page, choose the default, Place All Certificates in the Following Store (Personal), then click Next.
- 9 Click Finish.
- 10 Click OK in the information dialog that appears.

The new certificate, with the first and last name you specified, appears in the Certificates window.
- 11 Click Close in the Certificates window.
- 12 Click OK in the Internet Options window.

**Next Steps** After you import the certificate, you are ready to log in to the registry. See [“To Log In to the Registry” on page 21](#) for details.

## ▼ To Log In to the Registry

After you import a certificate to the browser, you are ready to log in.

- 1 **On the Step 4: Load Key to Web browser page, click the Finish button.**
- 2 **In the top banner area of the Web Console, click the Login button.**
- 3 **Click OK in the dialog boxes to verify the certificate.**

After you log in, an “Authentication successful.” message appears in the top banner area. In addition, the first and last names you entered appear after the Current User label in the top banner area of the Web Console, in Lastname, Firstname format.

## Authenticating to the Registry

After you log in to the Registry, authentication happens transparently whenever you try to add, delete, or modify a Registry object, because any write request triggers authentication based on the client certificate loaded into your browser.

After authentication is completed, access to the Registry is over https.

When your session expires, you are no longer authenticated by the Registry. A subsequent write request prompts the Web Console to re-authenticate you.

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**Note** – If authentication fails, stop and restart your browser and try again. If you accidentally choose the wrong certificate and have difficulty logging in, see [“Login Error from Mistake in Client Certificate Selection” on page 65](#) for information on what to do.

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## Searching the Registry

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The Search and Explore tabs in the menu area allow you to search the Registry.

- “Using the Search Tab” on page 23
- “Selecting a Query” on page 24
- “Searching by Object Type” on page 25
- “Searching by Name and Description” on page 27
- “Searching by Status” on page 27
- “Searching by Classification” on page 28
- “Performing WSDL Queries” on page 30
- “Viewing Search Results” on page 34
- “Viewing Object Details” on page 36
- “Using the Explore Tab” on page 39

### Using the Search Tab

Click the Search tab. The Search form opens. The form contains a Select Predefined Query combo box. It also contains a description of the selected query and three buttons:

- Search, which performs the query
- Clear, which clears the form and the Registry Objects area
- Help, which provides help on searching the Registry

The remaining contents of the form depend on which query you select. The default query is Basic Query.

- Select Predefined Query combo box
- Name text field
- Description text field
- ClassificationSchemes tree

The next few sections describe how to use these components.

## Selecting a Query

The Select Predefined Query combo box contains the items shown in [Table 2-1](#).

TABLE 2-1 Predefined Queries

Query Name	Search Purpose
Basic Query	The default generic query, which allows you to search by object type, name, description, and classification
Basic Query - Case Sensitive	Case-sensitive version of Basic Query
FindAllMyObjects	Finds all objects owned (published) by the user who makes the query. May take a long time if the user owns many objects
GetCallersUser	Finds the User object for the user who makes the query
WSDL Discovery Query	Finds Web Services Description Language (WSDL) documents
WSDL Binding Discovery Query	Finds abstract service interfaces protocol bindings described as WSDL Binding definitions
WSDL Port Discovery Query	Finds implementations of service interfaces described as WSDL Port definitions
WSDL PortType Discovery Query	Finds abstract service interfaces described as WSDL PortType definitions
WSDL Service Discovery Query	Finds web services described as WSDL Service definitions

The default selection is Basic Query. The search form for Basic Query and Basic Query — Case Sensitive contains the following components:

- Object Type combo box
- Name text field
- Description text field
- Status combo box
- Select Classification Node button

You can specify any or all of these criteria in a single search. The following sections describe how to perform basic queries:

- [“Searching by Object Type” on page 25](#)
- [“Searching by Name and Description” on page 27](#)
- [“Searching by Status” on page 27](#)
- [“Searching by Classification” on page 28](#)

Use the FindAllMyObjects query to search for all the objects that you have published. The query results list all the objects you own except for `AuditTableEvent` objects, which should not be edited or deleted.

Use the `GetCallersUser` query to view or modify data for the user you created when you registered.

See [“Performing WSDL Queries” on page 30](#) for information on using the WSDL queries.

## Searching by Object Type

The simplest search is by object type only.

The default choice in the Object Type combo box is `RegistryObject`, which finds all objects in the Registry. To narrow the search, change the object type.

The `ClassificationNode` choice lists concepts within classification schemes. `ClassificationNode` is a synonym for `Concept`.

[Table 2–2](#) describes the object types available in the Registry.

**TABLE 2–2** Service Registry Object Types

Object Type	Description
<code>AdhocQuery</code>	Represents an ad hoc query expressed in a query syntax. <code>AdhocQuery</code> objects are used for discovery of registry objects. <code>AdhocQuery</code> objects are similar in purpose to the concept of stored procedures in relational databases. For example, the predefined queries in the Search panel are all <code>AdhocQuery</code> objects.
<code>Association</code>	Defines a relationship between two objects.
<code>AuditableEvent</code>	Provides a record of a change to an object. A collection of <code>AuditableEvent</code> objects constitutes an object's audit trail.
<code>Classification</code>	Classifies an object by using a <code>ClassificationScheme</code> .
<code>ClassificationNode</code>	Represents a taxonomy element that has a structural relationship with other elements in an internal <code>ClassificationScheme</code> . Also called a <code>Concept</code> .
<code>ClassificationScheme</code>	Represents a taxonomy used to classify objects. In an internal <code>ClassificationScheme</code> , all taxonomy elements are defined in the registry as <code>Concept</code> instances. In an external <code>ClassificationScheme</code> , the values are not defined in the registry as <code>Concept</code> instances but instead are referenced by their <code>String</code> representations.
<code>ExternalIdentifier</code>	Provides additional information about an object by using <code>String</code> values within an identification scheme (an external <code>ClassificationScheme</code> ). Examples of identification schemes are DUNS numbers and Social Security numbers.
<code>ExternalLink</code>	Provides a URI for content that resides outside the registry.

TABLE 2-2 Service Registry Object Types (Continued)

Object Type	Description
ExtrinsicObject	Provides metadata that describes submitted content whose type is not intrinsically known to the registry and that therefore must be described by means of additional attributes, such as MIME type.
Federation	Represents an affiliated group of registries.
Notification	Represents a notification from the registry regarding an event that matches a Subscription.
Organization	Provides information about an organization. May have a parent, and may have one or more child organizations. Always has a User object as a primary contact, and may offer Service objects.
Person, User	Provides information about persons and registered users within the registry. User objects are affiliated with Organization objects.
Registry	Represents a registry.
RegistryPackage	Represents a logical grouping of any number of registry objects.
Service	Provides information on a service. May contain one or more ServiceBinding objects.
ServiceBinding	Represents technical information on how to access a service.
SpecificationLink	Provides the linkage between a ServiceBinding and a technical specification that describes how to use the service by using the ServiceBinding.
Subscription	Defines a User's interest in certain types of AuditableEvent. A User creates a Subscription in order to receive notification of certain types of events.

## ▼ To Search by Object Type

- 1 Choose an object type from the Object Type combo box.
- 2 Click the Search button, or place the cursor in the Name or Description text field and press Return.

The search returns all objects of the specified type. You can narrow the search by specifying a name, description, status, or classification.

## Searching by Name and Description

You can search for objects by name, by description, or by both.

### ▼ To Search by Name or Description

#### 1 Type a string in the Name or Description field.

By default, the search looks for a name or description that matches the entire string that you typed. You can use wildcards to find a range of objects.

The wildcard characters are percent (%) and underscore (\_).

The percent wildcard matches multiple characters:

- Type **%off%** to return names or descriptions that contain the string `off`, such as `Coffee`.
- Type **nor%** to return names or descriptions that start with `Nor` or `nor`, such as `North` and `northern`.
- Type **%ica** to return names or descriptions that end with `ica`, such as `America`.

The underscore wildcard matches a single character. For example, the search string `_us_` would match objects named `Aus1` and `Bus3`.

#### 2 Click the Search button or press Return.

## Searching by Status

An object in the Registry can have one of four statuses:

- Approved
- Deprecated
- Submitted
- Withdrawn

The default status of an object in the Registry is Submitted. An object can be approved or deprecated by a Registry administrator or by the owner of the object. An `ExtrinsicObject` has the status Withdrawn if its repository item has been removed.

### ▼ To Search by Status

#### 1 Choose a status from the Status combo box.

- 2 Click the **Search** button, or place the cursor in the **Name** or **Description** text field and press **Return**.

The search returns all objects that have the specified status. You can narrow the search by specifying an object type, name, description, or classification.

## Searching by Classification

Classification objects classify or categorize objects in the registry by using unique concepts (ClassificationNode objects) that define valid values within a classification scheme. The classification scheme is the parent in a tree hierarchy that contains generations of child concepts. Table 2-3 describes the classification schemes provided by the Registry specifications, which are called *canonical classification schemes*. Many of the terms in this table are defined in the Registry specifications.

TABLE 2-3 Canonical Classification Schemes

Classification Scheme Name	Usage	Description or Purpose
AssociationType	Frequently	Defines the types of associations between registry objects. Used as the value of the associationType attribute of an Association instance to describe the nature of the association.
ContentManagementService	Rarely	Defines the types of content management services. Used in the configuration of a content management service, such as a validation or cataloging service.
DataType	Frequently	Defines the data types for object attributes. Used as the value of the slotType attribute of a Slot instance to describe the data type of the Slot value.
DeletionScopeType	Occasionally	Defines the values for the deletionScope attribute of the RemoveObjectsRequest protocol message.
EmailType	Rarely	Defines the types of email addresses.
ErrorHandlingModel	Rarely	Defines the types of error handling models for content management services.
ErrorSeverityType	Rarely	Defines the different error severity types encountered by the Registry while processing protocol messages.

TABLE 2-3 Canonical Classification Schemes (Continued)

Classification Scheme Name	Usage	Description or Purpose
EventType	Occasionally	Defines the types of events that can occur in a registry.
InvocationModel	Rarely	Defines the different ways that a content management service can be invoked by the Registry.
NodeType	Occasionally	Defines the different ways in which a ClassificationScheme can assign the value of the code attribute for its ClassificationNode (Concept) objects.
NotificationOptionType	Rarely	Defines the different ways in which a client can be notified by the registry of an event within a Subscription.
ObjectType	Occasionally	Defines the different types of RegistryObject a registry may support.
PhoneType	Rarely	Defines the types of telephone numbers.
QueryLanguage	Rarely	Defines the query languages supported by the Registry.
ResponseStatusType	Rarely	Defines the different types of status for a RegistryResponse.
StatusType	Occasionally	Defines the different types of status for a RegistryObject.
SubjectGroup	Rarely	Defines the groups that a user can belong to for access control purposes.
SubjectRole	Rarely	Defines the roles that can be assigned to a user for access control purposes.

The primary purpose of the canonical classification schemes is not to classify objects but to provide enumerated types for object attributes. The Registry also contains a number of non-canonical classification schemes, and you can create your own.

## ▼ To Search by Classification

### 1 Click the Select Classification Node button.

The Classification Node Selector window appears.

- 2 Click the folder icon for the classification scheme you want to use.**  
The number in parentheses after each entry indicates how many concepts (ClassificationNode objects) the parent contains.
- 3 Expand concept nodes beneath the classification scheme until you find the leaf node by which you want to search. A leaf node is a node with no concepts beneath it.**
- 4 Select the leaf node.**
- 5 Click Close in the Classification Node Selector window.**  
The ID of the concept you chose appears in a Value text field.
- 6 Click the Search button, or place the cursor in the Name or Description text field and press Return.**

## Performing WSDL Queries

The Search panel contains predefined queries that allow you to search for WSDL files using different search criteria:

- WSDL Discovery Query
- WSDL Binding Discovery Query
- WSDL Port Discovery Query
- WSDL PortType Discovery Query
- WSDL Service Discovery Query

This section describes how to perform these searches. For all the searches, you can specify as many or as few of the search criteria as you wish.

### ▼ To Perform a WSDL Discovery Query

- 1 Choose WSDL Discovery Query from the Select Predefined Query combo box.**  
A search form appears.
- 2 Type values in the Name and/or Description fields.**
- 3 Select a value from the Status combo box.**
- 4 Type a value in the Target Namespace field.**
- 5 Click Search or press Return.**

## ▼ To Perform A WSDL Binding Discovery Query

- 1 Choose WSDL Binding Discovery Query from the Select Predefined Query combo box.  
A search form appears.
- 2 Type values in the Binding Name and/or Binding Description fields.
- 3 Select a value from the Binding Status combo box.
- 4 Type a value in the Binding Target Namespace field.
- 5 Select a value from the Binding Protocol Type combo box.
- 6 Select a value from the Binding Transport Type combo box.
- 7 Select a value from the SOAP Binding Style combo box.
- 8 Optionally, select the Consider PortType checkbox. If you If you select this checkbox:
  - a. Type values in the PortType Name and/or PortType Description fields.
  - b. Select a value from the PortType Status combo box.
  - c. Type a value in the PortType Target Namespace field.
- 9 Click Search or press Return.

## ▼ To Perform a WSDL Port Discovery Query

- 1 Choose WSDL Port Discovery Query from the Select Predefined Query combo box.  
A search form appears.
- 2 Type values in the Port Name and/or Port Description fields.
- 3 Select a value from the Port Status combo box.
- 4 Type a value in the Port Target Namespace field.
- 5 Type a value in the Port Endpoint field.

- 6 Optionally, select the Consider Binding checkbox. If you select this checkbox:
  - a. Type values in the Binding Name and/or Binding Description fields.
  - b. Select a value from the Binding Status combo box.
  - c. Type a value in the Binding Target Namespace field.
  - d. Select a value from the Binding Protocol Type combo box.
  - e. Select a value from the Binding Transport Type combo box.
  - f. Select a value from the SOAP Binding Style combo box.
  - g. Optionally, select the Consider PortType checkbox. If you select this checkbox:
    - i. Type values in the PortType Name and/or PortType Description fields.
    - ii. Select a value from the PortType Status combo box.
    - iii. Type a value in the PortType Target Namespace field.
- 7 Click Search or press Return.

## ▼ To Perform a WSDL PortType Discovery Query

- 1 Choose WSDL PortType Discovery Query from the Select Predefined Query combo box.  
A search form appears.
- 2 Type values in the PortType Name and/or PortType Description fields.
- 3 Select a value from the PortType Status combo box.
- 4 Type a value in the PortType Target Namespace field.
- 5 Click Search or press Return.

## ▼ To Perform a WSDL Service Discovery Query

1 Choose WSDL Service Discovery Query from the Select Predefined Query combo box.  
A search form appears.

2 Type values in the Service Name and/or Service Description fields.

3 Select a value from the Service Status combo box.

4 Type a value in the Service Target Namespace field.

5 Optionally, select the Consider Port checkbox. If you check this box:

a. Type values in the Port Name and/or Port Description fields.

b. Select a value from the Port Status combo box.

c. Type a value in the Port Target Namespace field.

d. Type a value in the Port Endpoint field.

e. Optionally, select the Consider Binding checkbox. If you select this checkbox:

i. Type values in the Binding Name and/or Binding Description fields.

ii. Select a value from the Binding Status combo box.

iii. Type a value in the Binding Target Namespace field.

iv. Select a value from the Binding Protocol Type combo box.

v. Select a value from the Binding Transport Type combo box.

vi. Select a value from the SOAP Binding Style combo box.

vii. Optionally, select the Consider PortType checkbox. If you select this checkbox:

Type values in the PortType Name and/or PortType Description fields.

Select a value from the PortType Status combo box.

Type a value in the PortType Target Namespace field.

**6 Click Search or press Return.**

**Next Steps** See [“To Find the WSDL Document for a Service” on page 34](#) for information on locating the WSDL file associated with the service you found.

**▼ To Find the WSDL Document for a Service**

After you find a service, you ordinarily want to find the WSDL file associated with the service so that you can use it to create a client proxy to communicate with the service. To do so, follow these steps.

- 1 Click the Details link for the Service object.**
- 2 Click the Associations tab.**  
The Source Object column contains a link named WSDL.
- 3 Click the WSDL link.**  
A Details window appears.
- 4 Click View Repository Item Content to view the WSDL file.**
- 5 Use your browser's Save As menu item to save the file to your local system.**

## Viewing Search Results

Objects found by a search appear in the Registry Objects area.

The Registry Objects area consists of the following:

- Buttons that are labeled Apply, Approve, Deprecate, Undeprecate, Bookmark, Relate, Delete, and Set or Change Status, which allow you to perform actions on objects. You must be the object's creator or a registry administrator to perform any of these actions except for Bookmark.
- A found objects display consisting of a search results table. For most objects, the table contains the following columns:
  - Pick checkbox. Select any two objects to activate the Relate button. See [“Creating Relationships Between Objects” on page 61](#) for details. Select one or more objects and click another button to perform that action. An error message appears if you do not have permission to perform the action.
  - Details link. Click this link to open the Details area directly below the Registry Objects area (see [“Viewing Object Details” on page 36](#)).

- Object Type field.
- Name field.
- Description field.
- Version field.
- Version Comment field.
- Status field.

For `ExtrinsicObject` objects, the display has two additional columns: Content Version and Content Version Comment. These columns apply to the repository item for the `ExtrinsicObject`.

For two kinds of objects, the Version and Version Comment columns are replaced by other content:

- `ExternalLink` objects: External URI
- `ServiceBinding` objects: Endpoint

## ▼ To Use the Bookmark Feature

The Bookmark feature of the user interface allows you to hold one or more objects in the Registry Objects area while you search for other objects. You can then create a relationship between two objects. See [“Creating Relationships Between Objects” on page 61](#) for details on how to perform this task.

- 1 Click Search and execute a query.**
- 2 In the Registry Objects area, select the Pick checkbox for the object or objects that you want to hold there and click the Bookmark button.**

The objects appear in a Bookmarked Objects area above the search results.
- 3 Execute another query.**

**Next Steps** When you have finished using a bookmarked object, select the Pick checkbox for the object and click the Remove Bookmark button. The object is removed from the Bookmarked Objects area. If it was the only object in the Bookmarked Objects area, the Bookmarked Objects area disappears.

## Viewing Object Details

In the search results table, click the Details link for an object to open the Details area immediately below the Registry Objects area.

This section has a row of buttons and a row of tabs:

- The buttons are Apply, Save, Cancel, Approve, Deprecate, Undeprecate, Delete, and Set or Change Status. The buttons represent actions that you can perform on the object.
- The tabs represent the object's attributes. The tabs vary depending on the object type. [Table 2-4](#) describes the tabs and the objects they apply to.

**TABLE 2-4** Attribute Tabs in the Details Area

Tab Name	Applies To
<i>Object-Type</i> Detail	All objects ( <i>Object-Type</i> is the object type name)
Slots	All objects
Classifications	All objects
External Identifiers	All objects
Associations	All objects
External Links	All objects
Audit Trail	All objects
Postal Addresses	Organization, User
Telephone Numbers	Organization, User
Email Addresses	Organization, User
Users	Organization
Organizations	Organization
Service Bindings	Service
Specification Links	ServiceBinding
Concepts	ClassificationScheme, ClassificationNode
Members	RegistryPackage
Affected Objects	AuditTableEvent

Click a tab to find out if the object has any values for the attribute. If it does, click the Details link for the attribute value to open a browser window with the details for the attribute value.

The Associations tab produces a table with three links for each Association:

- Details
- Source Object (the object type is shown)
- Target Object (the object type is shown)

In the Source Object and Target Object columns, the type of the object whose associations you are viewing is shown in bold.

The Audit Trail tab does not produce a table with a Details link. Instead, this tab produces a table that contains the following information:

- The event type
- The date and time of the event
- The name of the User that caused the event

For most objects, the Details area fields are as follows:

- Unique Identifier. For every object, the Unique Identifier is an active link. Click this link to view the XML for the object in a browser window. All registry objects are stored in XML format.
- Logical Unique Identifier. The Logical Unique Identifier is usually the same as the Unique Identifier. If versioning is turned on, the Logical Unique Identifier remains the same for all versions of the object, while the Unique Identifier for the new version receives a suffix that indicates the version number.
- Name
- Description
- Status (usually Submitted, meaning that the object has been published to the Registry)
- Version
- Version Comment

For many objects, the fields are largely self-explanatory (the postal addresses for an Organization, for example). For some objects, the fields require some explanation. The following sections describe these fields.

- [“Viewing Association Details” on page 38](#)
- [“Viewing Classification Scheme Details” on page 38](#)
- [“Viewing Extrinsic Object Details” on page 38](#)
- [“Viewing External Link Details” on page 39](#)

## Viewing Association Details

The Details area for an `Association` object contains the following additional fields:

- **Source Object and Target Object.** For the source and target objects of the association, the panel shows both the name and the object type. The **Confirmed By Source Owner** checkbox indicates whether or not the association was confirmed or approved by the source object owner. The **Confirmed By Target Owner** checkbox indicates whether or not the association was confirmed or approved by the target object owner. These checkboxes are always selected for intramural associations.
- **Association Type.** The combo box displays the selected type of the `Association`.
- **Is Extramural.** This checkbox is selected if at least one of the two associated objects is owned by a `User` other than the `User` who created the `Association`. Otherwise, the `Association` is defined as intramural.

## Viewing Classification Scheme Details

The Details area for a `ClassificationScheme` object contains the following additional fields:

- **External Classification Scheme checkbox.** This checkbox is selected if the classification scheme is defined outside the Registry (that is, if it has no concepts). An internal classification scheme is a classification scheme whose concept hierarchy is defined within the Registry.
- **The Value Type combo box, which contains one of the following selections:**
  - **Unique.** This value indicates that each node of the taxonomy has a unique code assigned to it. This value is the default when you create a classification scheme in Service Registry.
  - **Embedded Path.** This value indicates that the unique code assigned to each node of the taxonomy also encodes its path.
  - **Non-Unique.** In some cases nodes are not unique, and it is necessary to use the full path (from the `ClassificationScheme` to the node of interest) to identify the node. For example, in a geography taxonomy, Moscow could be under both Russia and the USA, where five states have cities that are named Moscow.

## Viewing Extrinsic Object Details

The Details area for an `ExtrinsicObject` object contains the following additional fields:

- **Content Version and Content Version Comment.** The Details area shows the version and optional comment for the repository item associated with the extrinsic object.
- **MimeType.** This field contains the MIME type of the extrinsic object.
- **Is Opaque? checkbox.** This checkbox is selected if the repository item content is not readable by the Registry (for example, if it is encrypted).

- **Object Type.** This field contains the subconcept within the `ObjectType/ExtrinsicObject` tree.
- **View Content.** Click the `View Repository Item Content` link to view the repository item in a browser window.

## Viewing External Link Details

The Details area for an `ExternalLink` object contains the following additional fields:

- **Object Type.** This field contains either the `ExternalLink` object type or a subconcept within the `ObjectType/ExtrinsicObject` tree.
- **Select Concept for Object Type button.** Click this button to choose a subconcept within the `ObjectType/ExtrinsicObject` tree that represents the content of the external URI.
- **A Display Content link under the External URI field.** Click this link to view the contents of the URI in a browser window.

## Using the Explore Tab

The Explore tab allows you to navigate through Registry and Repository content by using the metaphor of a hierarchy of file folders. The root folder, which is named `registry`, contains all Registry content.

### ▼ To Use the Explore Tab

- 1 Click the `Explore` link.
- 2 Click the folder labeled `registry`. This folder contains two subfolders: `userData`, where all user content is placed, and `ClassificationSchemes`.
- 3 Click a link to view the registry objects of that type. Click a folder or expand a node to view the object types at the next level.

### ▼ To Explore the Classification Schemes

- 1 Click the `ClassificationSchemes` folder to open the `ClassificationSchemes` tree hierarchy in the menu area.
- 2 Click any link to view that classification scheme in the `Registry Objects` area.

**3 Click a classification scheme folder to see the Concepts beneath it.**

If the Concept icons are folders, they have subconcepts, and you can click the icons to expand them. If the Concept icons are files, they have no subconcepts.

If the classification scheme folder is a file icon, the classification scheme does not have concepts that are viewable in the Explore area.

**4 Click a Concept link to view that concept in the Registry Objects area.**

## ▼ **To Explore the UserData Folder**

**1 Expand the `userData` node.**

**2 Expand the `RegistryObject` node. Do not click the link unless you want to view all registry objects.**

**3 Click a folder to view the registry objects of that type. Expand a node to view the object types at the next level.**

# Publishing and Managing Registry Objects

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The Create a New Registry Object menu item allows you to create objects and to publish the objects to the Registry. This chapter describes the following tasks:

- “Publishing Objects” on page 41
- “Adding a Classification to an Object” on page 50
- “Adding an External Identifier to an Object” on page 51
- “Adding an External Link to an Object” on page 52
- “Adding Custom Information to an Object Using Slots” on page 52
- “Adding a Postal Address to an Organization or User” on page 53
- “Adding a Telephone Number to an Organization or User” on page 54
- “Adding an Email Address to an Organization or User” on page 55
- “Adding a User to an Organization” on page 55
- “Adding a Child Organization to an Organization” on page 56
- “Adding a Service Binding to a Service” on page 56
- “Adding a Specification Link to a Service Binding” on page 57
- “Adding a Child Concept to a Classification Scheme or Concept” on page 58
- “Adding Objects to a Registry Package” on page 58
- “Changing the Status of Objects” on page 59
- “Removing Objects” on page 60
- “Creating Relationships Between Objects” on page 61

## Publishing Objects

Publishing objects to the registry is a three-step process:

1. Create the object.
2. Add details and other objects, saving them to memory but not publishing them to the Registry.
3. Publish the object to the Registry.

You can publish objects to the registry if you have created a user account and have logged in. To create a user account, follow the instructions in [“Creating a User Account” on page 16](#).

The first task below describes the steps that you follow to create any new object. The sections that follow describe the additional steps required to publish particular kinds of objects.

You can create and publish any of the objects listed in [Table 2–2](#), with the following exceptions:

- **Association.** See [“Creating Relationships Between Objects” on page 61](#) for details on creating Association objects.
- **Classification.** You always create a classification as a composed object. See [“Adding a Classification to an Object” on page 50](#) for details.
- **Notification.** A notification is created by the registry when a certain event occurs, as specified by a Subscription object.
- **ServiceBinding.** You always create a ServiceBinding as a composed object within a Service. See [“Adding a Service Binding to a Service” on page 56](#) for details.
- **SpecificationLink.** You always create a SpecificationLink as a composed object within a ServiceBinding. See [“Adding a Specification Link to a Service Binding” on page 57](#) for details.
- **Subscription.** Creating a subscription is currently an administrative task.

This section describes the following tasks:

- [“To Create and Publish a New Registry Object” on page 42](#)
- [“To Create and Publish an AdhocQuery Object” on page 43](#)
- [“To Create and Publish a ClassificationNode Object” on page 44](#)
- [“To Create and Publish a ClassificationScheme Object” on page 44](#)
- [“To Create and Publish an ExternalLink Object” on page 45](#)
- [“To Create and Publish an ExtrinsicObject Object” on page 45](#)
- [“To Create and Publish a Federation Object” on page 47](#)
- [“To Create and Publish an Organization Object” on page 48](#)
- [“To Create and Publish a Person or User Object” on page 48](#)
- [“To Create and Publish a Registry Object” on page 49](#)
- [“To Create and Publish a RegistryPackage Object” on page 49](#)
- [“To Create and Publish a Service Object” on page 50](#)

## ▼ To Create and Publish a New Registry Object

- 1 In the **Tasks** tab of the left menu area, click **Create a New Registry Object**.
- 2 In the **Registry Objects** area, choose an object type from the combo box and click **Add**.  
A Details form for the object appears in the Details area.

- 3 **Type a name in the Name field.**
- 4 **(Optional) Type a description in the Description field**
- 5 **(Optional) Type a comment in the Version Comment field.**
- 6 **(Optional) Replace the assigned Unique Identifier and Logical Unique Identifier with identifiers of your own choosing.**  
Each identifier must be a valid URN and must be unique within your Registry installation.
- 7 **Enter data in the fields specific to the object type.**
- 8 **Click Save to save the object in memory.**

---

**Note** – Make sure that you save the changes you make in any of the tab areas for the object before you move to another tab. If you do not save your work, it will be lost.

---

- 9 **(Optional) Use the tabs in the Details form to add and save composed objects.**
- 10 **Click Apply to publish the object to the Registry.**  
A status message appears, indicating whether the apply was successful.

**Next Steps** Either before or after you publish the object, you can edit the object by adding composed objects to it. [Table 2–4](#) lists the objects that you can add. Later sections describe how to add these objects.

## ▼ **To Create and Publish an AdhocQuery Object**

An AdhocQuery object represents an ad hoc query expressed in a query syntax. AdhocQuery objects are used for discovery of registry objects. AdhocQuery objects are similar in purpose to the concept of stored procedures in relational databases. For example, the predefined queries in the Search panel are all AdhocQuery objects.

- 1 **Execute Steps 1–6 in “To Create and Publish a New Registry Object” on page 42. In Step 2, select AdhocQuery.**
- 2 **(Optional) Select a query type from the Query Type combo box.**  
The default is SQL Query. Other supported query types are XQuery and ebXML Filter Query.

### 3 Type the text of the query in the Query String field.

For a SQL query, use pairs of single quotes to enclose items that you normally enclose in single quotes. These items are typically parameter placeholders and literals, when they occur in subqueries. For example, specify a parameter placeholder in a subquery as follows:

```
(SELECT id FROM ClassificationNode WHERE path LIKE '$objectTypePath')
```

Specify both a literal and a parameter placeholder as follows:

```
... AND (ro.id = s.parent AND s.name_ =  
'urn:oasis:names:tc:ebxml-regrep:profile:ws:wSDL:nameSpacesUsed'  
AND s.value LIKE '$nameSpacePattern')
```

### 4 Execute Steps 8–10 in [“To Create and Publish a New Registry Object” on page 42.](#)

## ▼ To Create and Publish a ClassificationNode Object

A `ClassificationNode` object represents a taxonomy element that has a structural relationship with other elements in an internal classification scheme. You can create a `ClassificationNode` object and then add it to a classification scheme, but it may be simpler to use the Concepts tab of the `ClassificationScheme` Details panel to create concepts.

- 1 Execute Steps 1–6 in [“To Create and Publish a New Registry Object” on page 42.](#) In Step 2, select `ClassificationNode`.
- 2 Type a value for the `ClassificationNode` object in the Value field.  
The Classification Scheme, Parent Id, and Path fields are grayed out.
- 3 Execute Steps 8–10 in [“To Create and Publish a New Registry Object” on page 42.](#)

## ▼ To Create and Publish a ClassificationScheme Object

A `ClassificationScheme` object represents a taxonomy used to classify objects. In an internal `ClassificationScheme`, all taxonomy elements are defined in the registry as `Concept` instances. In an external `ClassificationScheme`, the values are not defined in the registry as `Concept` instances but instead are referenced by their `String` representations.

- 1 Execute Steps 1–6 in [“To Create and Publish a New Registry Object” on page 42.](#) In Step 2, select `ClassificationScheme`.  
The External Classification Scheme checkbox is selected, to indicate that the scheme has no concepts. If you add concepts to the classification scheme, the checkbox will no longer be selected.
- 2 Select a value from the Value Type combo box:

- **Unique.** Indicates that each node of the taxonomy has a unique code assigned to it.
- **Embedded Path.** Indicates that the unique code assigned to each node of the taxonomy also encodes its path.
- **Non-Unique.** Indicates that nodes are not unique and that it is necessary to use the full path (from the `ClassificationScheme` to the node of interest) to identify the node.

The default is `Unique`.

- 3 **Execute Steps 8–10 in [“To Create and Publish a New Registry Object” on page 42.](#)**

## ▼ **To Create and Publish an ExternalLink Object**

An `ExternalLink` object provides a URI for content that resides outside the registry.

- 1 **Execute Steps 1–6 in [“To Create and Publish a New Registry Object” on page 42.](#) In Step 2, select `ExternalLink`.**

The `Object Type` field contains the value `ExternalLink`.

- 2 **(Optional) Click the `Select Concept for Object Type` button to select an object type for the data referenced by the URI.**

In the `Extrinsic Object Classification Node Selector` window, expand the nodes until you reach the appropriate concept within the `ExtrinsicObject` type. After you click `OK`, the `Object Type` window contains the type you selected.

- 3 **Type the URI for the external link in the `External URI` field.**
- 4 **Execute Steps 8–10 in [“To Create and Publish a New Registry Object” on page 42.](#)**

---

**Note** – If you get an error when you try to save an `ExternalLink` object, it means that an administrative task needs to be performed. See [“Unable to Create ExternalLink or ServiceBinding” on page 64](#) for details.

---

## ▼ **To Create and Publish an ExtrinsicObject Object**

An `ExtrinsicObject` provides metadata that describes content whose type is not intrinsically known to the registry and that therefore must be described by means of additional attributes, such as MIME type.

Use an `ExtrinsicObject` to publish files of various kinds. Most commonly, these are `Web Services` artifacts such as `WSDL` files.

The [ebXML Registry Profile for Web Services](#) is an OASIS standard that defines the ebXML Registry profile for publication, management, governance, discovery, and reuse of Web Services artifacts. By default, Service Registry implements this profile. In practice, this means that when you publish a WSDL file to the Registry as an `ExtrinsicObject` object, the Registry creates some standard metadata for the document, in effect creating the web service defined by the document. This feature is called *WSDL cataloging*.

To publish one or more WSDL files that have dependencies on each other or on other files (such as XSD files), create a zip file that contains all the files.

It is possible for an administrator to disable the WSDL cataloging feature. See “Disabling the WSDL Cataloger” in *Service Registry 3.1 Administration Guide* for details.

- 1 Execute Steps 1–6 in “To Create and Publish a New Registry Object” on page 42. In Step 2, select `ExtrinsicObject` or one of its subtypes.**

For example, to publish one or more WSDL files, select `WSDL`.

- 2 (Optional) Type the MIME type of the object in the `MimeType` field. The type should be one of those listed in <http://www.iana.org/assignments/media-types>.**

If you are uploading a stand-alone WSDL file (a text file containing XML), set the MIME type to `text/xml`.

If you are uploading a zip file containing multiple WSDL (and, optionally, XSD) files, set the MIME type to `application/zip`.

- 3 (Optional) Select the `Is Opaque` checkbox if the content of the object is not readable by the registry (for example, if it is encrypted).**
- 4 Click the `Select Content for Object Type` button if you need to select an object type more specific than `ExtrinsicObject`.**

In the `Extrinsic Object Classification Node Selector` window, expand the nodes until you reach the appropriate concept within the `ExtrinsicObject` type. After you click OK, the `Object Type` window contains the type you selected.

- 5 Click the `Choose Repository Item File` button to locate the repository item for the `ExtrinsicObject`.**

- a. In the `File Upload` window, type the file path in the text field or click `Browse`.**

- b. If you clicked `Browse`, use the file chooser window to navigate to the file, then click `Open`.**

- c. In the `File Upload` window, click `Upload File`.**

- d. Click `OK`.**

The following additional items appear in the Details panel:

- A Content Version field (grayed out)
- A Content Version Comment field, which you can fill in
- A Remove Repository Item button
- A View Repository Item Content link

**6** Execute Steps 8–10 in [“To Create and Publish a New Registry Object” on page 42.](#)

**Next Steps** After you create an `ExtrinsicObject` object that refers to a WSDL file, you can find it by using the WSDL Discovery Query. Also, if you use Basic Query to search for `ExtrinsicObject` objects of type WSDL, for `Service` objects, and for `ServiceBinding` objects, you will find that the Registry has created all the objects specified by the elements of the WSDL file:

- For a service element, it creates a `Service` object. For the port subelement of the service element, it creates a `ServiceBinding` object.
- For a portType element, it creates a `PortType` object (a subtype of a WSDL `ExtrinsicObject`).
- For a binding element, it creates a `Binding` object (a subtype of a WSDL `ExtrinsicObject`).

## ▼ To Create and Publish a Federation Object

A Federation represents an affiliated group of registries. Its only attributes are the basic `RegistryObject` attributes. You must be an administrator in order to create a Federation object.

- 1 Execute Steps 1–6 in [“To Create and Publish a New Registry Object” on page 42.](#) In Step 2, select **Federation**.
- 2 Execute Steps 8–10 in [“To Create and Publish a New Registry Object” on page 42.](#)
- 3 Add affiliated registries to the federation by following the steps in [“Creating Relationships Between Objects” on page 61.](#) The specific steps are as follows:
  - a. Search for the federation, select its **Pick** checkbox, and click **Bookmark**.
  - b. Search for the registry, select its **Pick** checkbox, and click **Relate**.
  - c. In the **Create Relationship** area, select the federation as the source object. The registry becomes the target object.
  - d. Set the **AssociationType** to **HasFederationMember**.

## ▼ To Create and Publish an Organization Object

An Organization object provides information about an organization. It may have a parent, and may have one or more child organizations. It always has a User object as a primary contact, and may offer services by creating associations between the organization and one or more Service objects.

1 Execute Steps 1–6 in [“To Create and Publish a New Registry Object” on page 42](#). In Step 2, select **Organization**.

2 (Optional) Type values in the **PostalAddresses** fields.

3 Execute Steps 8–10 in [“To Create and Publish a New Registry Object” on page 42](#).

See the following sections for details on adding composed objects to an Organization object:

- [“Adding a Postal Address to an Organization or User” on page 53](#)
- [“Adding a Telephone Number to an Organization or User” on page 54](#)
- [“Adding an Email Address to an Organization or User” on page 55](#)
- [“Adding a User to an Organization” on page 55](#)
- [“Adding a Child Organization to an Organization” on page 56](#)

4 To add a Service to an Organization, follow the steps in [“Creating Relationships Between Objects” on page 61](#). The specific steps are as follows:

- a. Search for the organization, select its **Pick** checkbox, and click **Bookmark**.
- b. Search for the service, select its **Pick** checkbox, and click **Relate**.
- c. In the **Create Relationship** area, select the organization as the source object. The service becomes the target object.
- d. Set the **AssociationType** to **OffersService**.

## ▼ To Create and Publish a Person or User Object

A Person or User object provides information about persons and registered users within the registry. Both kinds of objects have identical attributes. A User object is affiliated with an Organization object as the primary contact. User objects are also used in **AuditableEvent** objects to identify the requestor that sent the request that generated the **AuditableEvent**.

The recommended way to create User objects is through the **User Registration Wizard**. Use the **Web Console** to create Person objects whenever you want to create metadata about persons who will not themselves be accessing the registry.

If you want to be able to create more than one postal address, email address, or telephone number for the person, create a User object. The Web Console allows you to add postal addresses, email addresses, and telephone numbers as composed objects for a User object, but not for a Person object.

- 1 **Execute Steps 1–6 in “To Create and Publish a New Registry Object” on page 42. In Step 2, select Person or User.**
- 2 **Type values in the Person Name fields.**  
Specify a value for at least one of these fields.  
  
Do not use the Name field. The Web Console ignores any value you type in the Name field for a Person or User object.
- 3 **Add composed objects as described in the following sections:**
  - “Adding a Postal Address to an Organization or User” on page 53
  - “Adding a Telephone Number to an Organization or User” on page 54
  - “Adding an Email Address to an Organization or User” on page 55
- 4 **Execute Steps 8–10 in “To Create and Publish a New Registry Object” on page 42.**

## ▼ **To Create and Publish a Registry Object**

A Registry object represents a registry. Its only attributes are the basic RegistryObject attributes. You must be an administrator in order to create a Registry object.

- 1 **Execute Steps 1–6 in “To Create and Publish a New Registry Object” on page 42. In Step 2, select Registry.**
- 2 **Execute Steps 8–10 in “To Create and Publish a New Registry Object” on page 42.**

**Next Steps** See “To Create and Publish a Federation Object” on page 47 for information on how to add the registry to a federation.

## ▼ **To Create and Publish a RegistryPackage Object**

A RegistryPackage object represents a logical grouping of any number of registry objects.

- 1 **Execute Steps 1–6 in “To Create and Publish a New Registry Object” on page 42. In Step 2, select RegistryPackage.**
- 2 **Execute Steps 8–10 in “To Create and Publish a New Registry Object” on page 42.**

- 3 To add objects to the package, follow the instructions in [“Adding Objects to a Registry Package” on page 58](#).

## ▼ To Create and Publish a Service Object

A Service object provides information on a service. It may contain one or more ServiceBinding objects, which represent technical information on how to access the service.

The most common way to publish a Service object is to publish an ExtrinsicObject object whose content consists of one or more WSDL files. For more information, see [“To Create and Publish an ExtrinsicObject Object” on page 45](#).

- 1 Execute Steps 1–6 in [“To Create and Publish a New Registry Object” on page 42](#). In Step 2, select Service.
- 2 Execute Steps 8–10 in [“To Create and Publish a New Registry Object” on page 42](#).
- 3 To add ServiceBinding objects to the service, follow the instructions in [“Adding a Service Binding to a Service” on page 56](#).
- 4 To add SpecificationLink objects to a ServiceBinding, follow the instructions in [“Adding a Specification Link to a Service Binding” on page 57](#).

## Adding a Classification to an Object

To create a classification, you use an *internal classification scheme*. An internal classification scheme contains a set of concepts whose values are known to the Registry.

## ▼ To Add a Classification

To add a Classification to an object, search for the appropriate classification scheme, then choose a concept within that classification scheme.

- 1 In the Details area for the object, click the Classifications button.  
The Classifications table, which can be empty, appears.
- 2 Click Add.  
A Details Panel window opens.
- 3 Type a name and, optionally, a description for the classification.

- 4 **Click the Select Classification Scheme or Concept button.**  
A Classification Scheme/Node Selector window opens.
- 5 **Expand the ClassificationSchemes node. Then expand concept nodes until you have selected the leaf node that you want to use.**
- 6 **Click OK to close the Classification Scheme/Node Selector window.**  
The classification scheme, concept, and value appear in the Details Panel window.
- 7 **Click Save to save the new object and close the Details Panel window.**
- 8 **Click Apply in the Details area for the object.**

## Adding an External Identifier to an Object

To create an external identifier, you use an *external classification scheme*. An external classification scheme has values that are not known to the Registry because the classification scheme has no concepts.

### ▼ To Add an External Identifier

To add an external identifier to an object, search for the appropriate classification scheme, then specify a value.

- 1 **In the Details area for the object, click the External Identifiers tab.**  
The External Identifiers table, which can be empty, appears.
- 2 **Click Add.**  
A Details Panel window opens.
- 3 **Type a name and, optionally, a description for the external identifier.**
- 4 **Click the Select ClassificationScheme button.**  
A ClassificationScheme/Concept Selector window opens.
- 5 **Expand the ClassificationSchemes node, then select a classification scheme that has no concepts.**
- 6 **Click OK to close the ClassificationScheme/Concept Selector window.**  
The classification scheme appears in the Details Panel window.

- 7 **Type a value in the Value field.**
- 8 **Click Save to save the new object and close the Details Panel window.**
- 9 **Click Apply in the Details area for the object.**

## Adding an External Link to an Object

An external link allows you to associate a URI with a registry object.

### ▼ To Add an External Link

- 1 **In the Details area for the object, click the External Links tab.**

The External Links table, which can be empty, appears.

- 2 **Click Add.**

A Details Panel window opens.

- 3 **Type a name for the external link.**

- 4 **Type the URL for the external link in the External URI field.**

- 5 **(Optional) Click the Select Concept for Object Type button if you want to specify the type of content to which the URL points.**

Expand the ClassificationSchemes node. Locate the content type by expanding the ObjectType, RegistryObject, and ExtrinsicObject nodes. Select the concept, then click OK. If you do not find a suitable type, click Cancel. You can create a new concept for ExtrinsicObjects if you want.

- 6 **Click Save to save the new object and close the Details Panel window.**

- 7 **Click Apply in the Details area for the object.**

## Adding Custom Information to an Object Using Slots

A slot contains extra information that would otherwise not be stored in the Registry. Slots provide a way to add arbitrary attributes to objects.

## ▼ To Add a Slot

- 1 In the Details area for the object, click the Slots tab.**

The Slots table, which can be empty, appears.
- 2 Click Add.**

A Details Panel window opens.
- 3 Type a name for the Slot.**

The name is ordinarily a human-friendly URN.
- 4 (Optional) Type a value in the Slot Type field. You can use this field to specify a data type for the slot or to provide a way to group slots together.**

The type is ordinarily the unique identifier value of a concept in the Data Type classification scheme.
- 5 Type a value in the Values field.**
- 6 Click Save to save the new object and close the Details Panel window.**
- 7 Click Apply in the Details area for the object.**

## Adding a Postal Address to an Organization or User

An Organization or User object can have one or more postal addresses.

## ▼ To Add a Postal Address

- 1 In the Details area for the Organization or User, click the Postal Addresses tab.**

The Postal Addresses table, which can be empty, appears.
- 2 Click Add.**

A Details Panel window opens.
- 3 Type values in the fields. All fields are optional.**
  - Street Number
  - Street
  - City
  - State or Province

- Country
  - Postal Code
- 4 Click **Save** to save the new object and close the Details Panel window.
  - 5 Click **Apply** in the Details area for the object.

## Adding a Telephone Number to an Organization or User

An Organization or User object can have one or more telephone numbers.

### ▼ To Add a Telephone Number

- 1 **In the Details area for the Organization or User, click the Telephone Numbers tab.**  
The Telephone Numbers table, which can be empty, appears.
- 2 **Click Add.**  
A Details Panel window opens.
- 3 **Select a value from the Type combo box.**  
The following values are available:
  - Beeper
  - FAX
  - Home Phone
  - Mobile Phone
  - Office Phone
- 4 **Type values in the fields. All fields are optional.**
  - Country Code
  - Area Code
  - Phone Number
  - Extension
- 5 **Click Save to save the new object and close the Details Panel window.**
- 6 **Click Apply in the Details area for the object.**

## Adding an Email Address to an Organization or User

An `Organization` or `User` object can have one or more email addresses.

### ▼ To Add an Email Address

- 1 In the Details area for the `Organization` or `User`, click the `Email Addresses` tab.**  
The `Email Addresses` table, which can be empty, appears.
- 2 Click `Add`.**  
A `Details Panel` window opens.
- 3 Select a value from the `Type` combo box: `Home Email` or `Office Email`.**
- 4 Type a value in the `Email Address` field.**
- 5 Click `Save` to save the new object and close the `Details Panel` window.**
- 6 Click `Apply` in the `Details` area for the object.**

## Adding a User to an Organization

An `Organization` object can have one or more users. One user is the primary contact, which is normally the user that created the organization. You can create and add additional users.

### ▼ To Add a User

- 1 In the Details area for the `Organization`, click the `Users` tab.**  
The `Users` table appears.
- 2 Click `Add`.**  
A `Details Panel` window opens.
- 3 (Optional) Type a description of the user in the `Description` field.**
- 4 In the `First Name`, `Middle Name`, and `Last Name` fields, type the first name, middle name, and surname of the user. Specify at least one of these fields.**  
Use these fields instead of the `Name` field. The `Web Console` ignores any value you type in the `Name` field for a `Person` or `User` object.

- 5 Click **Save** to save the new object and close the **Details Panel** window.
- 6 Click **Apply** in the **Details** area for the object.

## Adding a Child Organization to an Organization

An Organization can have one or more child organizations. To add a child organization to an Organization, follow these steps:

### ▼ To Add a Child Organization

- 1 In the **Details** area for the Organization, click the **Organizations** tab.  
The Organizations table appears.
- 2 Click **Add**.  
A Details Panel window opens.
- 3 In the **Name** field, type a name for the new organization.
- 4 (Optional) Type a description in the **Description** field.
- 5 (Optional) Type values in the address fields.
- 6 Click **Save** to save the new object and close the **Details Panel** window.
- 7 Click **Apply** in the **Details** area for the object.

## Adding a Service Binding to a Service

A Service normally has one or more service bindings.

### ▼ To Add a Service Binding

- 1 In the **Details** area for the Service, click the **Service Bindings** tab.  
The Service Bindings table appears.
- 2 Click **Add**.  
A Details Panel window opens.

- 3 In the **Name** field, type a name for the service binding.
- 4 (Optional) Type a description of the service binding in the **Description** field.
- 5 In the **Access URL** field, type the URL for the service binding.
- 6 (Optional) In the **Target Binding** field, type the unique identifier of another `ServiceBinding` object to which this service binding refers.
- 7 Click **Save** to save the new object and close the **Details Panel** window.
- 8 Click **Apply** in the **Details** area for the object.

## Adding a Specification Link to a Service Binding

A `ServiceBinding` object can have a `SpecificationLink` object.

### ▼ To Add a Specification Link

- 1 In the **Details** area for the `ServiceBinding`, click the **Specification Links** tab.  
The **Specification Links** table appears.
- 2 Click **Add**.  
A **Details Panel** window opens.
- 3 In the **Name** field, type a name for the `SpecificationLink`.
- 4 (Optional) Type a description of the `SpecificationLink` in the **Description** field.
- 5 (Optional) In the **Usage Description** field, type a usage description for the usage parameters, if the `SpecificationLink` has usage parameters.
- 6 (Optional) In the **Usage Parameters** field, type the usage parameters, if the `SpecificationLink` has usage parameters.
- 7 In the **Specification Object** field, type the Unique Identifier of the `ExtrinsicObject` or `ExternalLink` object that represents the technical specification for the parent `ServiceBinding` (for example, a WSDL document).
- 8 Click **Save** to save the new object and close the **Details Panel** window.

- 9 Click **Apply** in the **Details** area for the object.

## Adding a Child Concept to a Classification Scheme or Concept

A `ClassificationScheme` normally has numerous child concepts, which can also have child concepts.

### ▼ To Add a Child Concept

- 1 In the **Details** area for the `ClassificationScheme`, click the **Concepts** tab.  
The **Concepts** table appears.
- 2 Click **Add**.  
A **Details Panel** window opens.
- 3 In the **Name** field, type a name for the concept.
- 4 (Optional) Type a description of the concept in the **Description** field.
- 5 In the **Value** field, type a value for the concept.
- 6 Click **Save** to save the new object and close the **Details Panel** window.
- 7 Click **Apply** in the **Details** area for the object.

## Adding Objects to a Registry Package

A `RegistryPackage` is an object that contains other registry objects. Typically, you use a `RegistryPackage` to group logically related objects. The objects can be of different types and can have different owners.

You add objects to a `RegistryPackage` by specifying their unique identifiers. If you try to type the unique identifiers, you are likely to make errors. Therefore, the following steps describe how to add objects by copying and pasting the identifiers.

### ▼ To Add Objects to a Registry Package

- 1 Create a `RegistryPackage` object as described in [“To Create and Publish a New Registry Object” on page 42](#). Specify a name and, optionally, a description, but do not add any objects to the `RegistryPackage` at this time.

- 2 After you click **Apply** to save the RegistryPackage, **bookmark the RegistryPackage as described in “To Use the Bookmark Feature” on page 35.**
- 3 Use the **Web Console** to search for the objects you want to add to the RegistryPackage. **Bookmark each object as you find it.**
- 4 Click the **Details** link for an object you want to add to the RegistryPackage.
- 5 In the **Details** panel for the object, copy the **Unique Identifier** by using your keyboard (**Control-C** or the **Copy** key).
- 6 In the **Search Results** area, click the **Details** link for the RegistryPackage.
- 7 In the **Details** area for the object, click the **Members** tab.
- 8 Click **Add to Package.**
- 9 In the **Unique Identifier** field, use your keyboard to paste the identifier you copied (**Control-V** or the **Paste** key).
- 10 Click **Add.**  
The object appears in the Registry Objects area.
- 11 Click **Apply** in the **Details** area to save the RegistryPackage.
- 12 Repeat steps 4 through 11 to add each additional object to the RegistryPackage.

## Changing the Status of Objects

In addition to publishing, editing, and removing objects, you can perform the following actions on them if you are the owner or are otherwise authorized to do so:

- Approval
- Deprecation
- Undeprecation

These features are useful in a production environment if you want to establish a version control policy for registry objects. For example, you can approve a version of an object for general use, and you can deprecate an obsolete version before you remove it. If you change your mind after deprecating an object, you can undeprecate it.

The default status of a created object is Submitted.

You perform all these actions in the Search Results area or in the Details area for an object.

- To approve an object, select the object and click the Approve button. A message that confirms the approval appears. The event is added to the Audit Trail.  
An alternative way to approve an object is to select Approved from the Set or Change Status combo box and then click the Set or Change Status button.
- To deprecate an object, select the object and click the Deprecate button. A message that confirms the deprecation appears. The event is added to the Audit Trail.  
An alternative way to deprecate an object is to select Deprecated from the Set or Change Status combo box and then click the Set or Change Status button.
- To undeprecate an object, select the object and click the Undeprecate button. A message verifying the undeprecation appears. The event is added to the Audit Trail.  
An alternative way to undeprecate an object is to select Submitted from the Set or Change Status combo box and then click the Set or Change Status button. This returns the object to its default state of Submitted.

---

**Note** – The Withdrawn status is set automatically on an `ExtrinsicObject` object when you remove its repository item. Do not set this status manually.

---

## Removing Objects

To remove an object that you own from the Registry, select the object in the Search Results area and click the Delete button.

---

**Note** – Do not delete the User object that was created for you when you performed user registration. If you delete this object, you can no longer perform any actions on objects that you published as that user, and you must perform user registration again in order to publish more objects.

Do not delete `AuditableEvent` objects for objects that you own. If you delete an `AuditableEvent` object, the audit trail for the object that it belongs to becomes corrupted. (`AuditableEvent` objects for objects that you own do not appear in the Search Results area if you do a `FindAllMyObjects` search, but they do appear if you perform a Basic Query for `AuditableEvent` objects.)

---

If the object is an extrinsic object, you have two choices:

- Choose Delete Object and Repository Item (the default) from the Deletion Options combo box to delete both the `ExtrinsicObject` registry object and the repository item to which it refers.
- Choose Delete Repository Item Only to delete the repository item and leave the `ExtrinsicObject` in the Registry. You can then add another repository item.

The Deletion Options combo box is meaningful only for extrinsic objects.

## Creating Relationships Between Objects

Objects can have two kinds of relationship: references and associations. Both kinds of relationship are *unidirectional*. That is, each relationship has a source object and a target object.

The Registry supports references, which are called ObjectRefs, between certain types of objects. For example, if you create a Service and a ServiceBinding, you can create a ServiceBinding reference from the Service to the ServiceBinding. However, you cannot create a reference from the ServiceBinding to the Service. A reference is not a registry object.

An Association is a registry object. You can create an Association from any registry object to any other. The Registry supports an AssociationType classification scheme that includes a number of predefined association types: OffersService, RelatedTo, HasMember, and so on. You can also create new association types. If you own both objects in the Association, the Association is an *intramural association*. If you do not own both objects, the Association is an *extramural association*. If you create an Organization and add a Service to it, an Association of type OffersService is automatically created from the Organization to the Service.

If no valid reference exists for the source and target objects, you cannot create a reference.

You use the Relate button in the Registry Objects area to relate two objects. This button becomes active when you select two objects in the search results table.

If the two objects are not both visible in the search results table, select the Pick checkbox to bookmark an object while you find the object to which you want to relate it. For details, see [“To Use the Bookmark Feature” on page 35](#).

### ▼ To Create a Reference

- 1 In the Registry Objects area, select two objects and click Relate.**
- 2 In the Create Relationship area, select the source object if it is not already selected.**

The other object becomes the target object.

If a valid reference exists for the source and target objects, the Reference option is selected by default, and the valid reference attribute appears. If no valid reference exists for the source and target objects, the Reference radio button is grayed out.

- 3 Click Save to save the Reference.**

## ▼ **To Create an Association**

- 1 In the Registry Objects area, select two objects and click Relate.**
- 2 In the Create Relationship area, select the source object if it is not already selected.**  
The other object becomes the target object.
- 3 Select the Association radio button, if it is not already selected.**
- 4 Type a name and, optionally, a description for the Association in the Details area.**  
The source and target object ID values are already filled in.
- 5 Choose a type value from the Association Type combo box.**
- 6 Click Apply to save the Association.**

# Troubleshooting

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This chapter describes solutions to some problems that you can encounter when using the Web Console.

- “Unable to Access Service Registry” on page 63
- “Preferred Locale Is Not Used” on page 64
- “Search Panel Labels Do Not Appear in Current Locale” on page 64
- “Unable to Create ExternalLink or ServiceBinding” on page 64
- “Web Console Error Messages Are Not Clear” on page 64
- “New Registry Object Cannot Be Saved” on page 65
- “Web Console Is Unresponsive” on page 65
- “Login Error from Mistake in Client Certificate Selection” on page 65
- “Missing Content Error When Publishing WSDL File” on page 66

See “Known Issues and Bugs” in *Service Registry 3.1 Release Notes* for details about other problems you might encounter, along with workarounds.

## Unable to Access Service Registry

If you receive either an Error 404 or a “Connection refused” message when you try to use the Web Console, it is likely either that the Registry is not running or that you specified an incorrect URL.

Make sure that you specify `http://hostname:6480/soar/`. You might need to specify the domain in addition to the hostname: `hostname.domain`.

To make sure that the Registry is running, use the command-line or web interface to the Application Server domain for the Registry. For details, see “Administering the Application Server Domain for Service Registry” in *Service Registry 3.1 Administration Guide*.

## Preferred Locale Is Not Used

If the Web Console is not using your preferred locale, check your web browser preference settings. Make sure the preferred locale is at the top of the list of locales. See [“Changing the Default Language” on page 14](#) for details.

## Search Panel Labels Do Not Appear in Current Locale

If the Search Panel labels do not appear in the current locale after you change the locale and click Reset Locale, click End Session, then Return to Registry. See [“Changing the Default Language” on page 14](#) for information on changing the locale.

## Unable to Create ExternalLink or ServiceBinding

You might get an error in one of the following situations:

- When you specify an External URI for an ExternalLink object
- When you specify an Access URI for a ServiceBinding object

The error message looks like this:

```
The URL: uri is not resolvable.  
Use Absolute Path Format [scheme:][//authority][path][?query][#fragment]
```

This error means that the administrative task described in “Configuring the Java Virtual Machine (JVM) for the Registry Domain” in *Service Registry 3.1 Administration Guide* has not been performed. The Service Registry administrator for your site needs to perform this task and restart the Registry before you can create these objects.

## Web Console Error Messages Are Not Clear

For clarification of the problem that is causing a Web Console error message, examine the server log for the Application Server domain for the registry. For details, see “Administering the Application Server Domain for Service Registry” in *Service Registry 3.1 Administration Guide*.

## New Registry Object Cannot Be Saved

If you get an error message when you try to save a new object in the Registry:

- If you are using a Registry-generated certificate, make sure that you imported the certificate into your browser.
- If you are using a third-party certificate, make sure your administrator placed the Certificate Authority root certificate in the truststore of the Application Server domain for the Registry. For details, see “To Add Root Certificates to the Trusted Certificates in the Registry Domain” in *Service Registry 3.1 Administration Guide*.

## Web Console Is Unresponsive

If the Web Console becomes unresponsive, perform the following steps:

1. Make a note of the error messages that appear.
2. Clear the session cookie in your browser. To clear the cookie, find the cookie with the name JSESSIONID at the site where the Registry is running and remove it. If you are unsure, delete all cookies.
3. Restart the Web Console as described in “[Starting the Web Console](#)” on page 13.
4. Contact Registry Support and inform them of the error messages and of the steps that led to the error.

## Login Error from Mistake in Client Certificate Selection

If you have more than one client certificate loaded into your web browser, and you choose the wrong one when you try to log in to Service Registry, the login attempt fails. To correct this problem, clear your security session by following the instructions for your web browser.

Follow these steps for the supported version of Firefox:

1. Choose Tools→Options→Advanced→Certificates.
2. In the Certificates dialog, under Client Certificate Selection, select Ask Every Time.
3. Also in the Certificates dialog, click Manage Security Devices.
4. In the Device Manager dialog, select Software Security Device and click Log Out.
5. Click OK in the Device Manager dialog.
6. Click OK in the Options dialog.

Follow these steps for Mozilla and for older versions of Firefox:

1. Choose Edit→Preferences→Privacy & Security→Certificates.
2. In the Certificates dialog, under Client Certificate Selection, select Ask Every Time.
3. Click Manage Security Devices.
4. In the Device Manager dialog, select Software Security Device and click Log Out.
5. Click OK in the Device Manager dialog.
6. Click OK in the Preferences dialog.

If the problem occurs in Internet Explorer, consult the Internet Explorer documentation.

## Missing Content Error When Publishing WSDL File

You may see the following error message when you publish a WSDL file:

The following required content is missing from the submission: <filename>. Add this file to your zip file, and resubmit the request.

This error means that the Registry cannot find a file that your WSDL file depends on. You must submit a zip file that contains all the files (WSDL files, XSD files, and so on) that the WSDL file depends on. See [“To Create and Publish an ExtrinsicObject Object” on page 45](#) for details.

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