# **HP SOA Systinet**

Software Version: 3.10

# User Guide

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## About this Guide

Welcome to HP SOA Systinet, the foundation of Service Oriented Architecture, providing an enterprise with a single place to organize, understand, and manage information in its SOA. The standards-based architecture of SOA Systinet maximizes interoperability with other SOA products.



HP Software controls access to components of SOA Systinet with a license. This document describes the full functionality of SOA Systinet including licensed components. If your license does not include these licensed components, their features are not available.

### In this Guide

SOA Systinet User Guide describes the features and functionality of the product for normal users. It is organized according to the user interface – a part for the common UI features and then a part for the features and functionality of each tab.



This guide describes the default installation of SOA Systinet. The format and content of each tab can be modified using HP SOA Systinet Customization Editor. All screenshots in this guide are from the **Service Publisher** perspective.

The **Administrator** perspective displays additional functionality.

For details, see the HP SOA Systinet Administrator Guide.

The **General** perspective may not display all the functionality described in this guide.

This guide contains the following parts:

• Part I, "Getting Started"

An introduction to the features of the user interface and the common tasks that can be accessed from all pages.

#### • Part II, "Dashboard"

The features of the Dashboard and the tasks performed there.

#### • Part III, "Services"

A guide to the Services tab and the creation and management of services, lifecycles, and contracts.

#### • Part IV, "Policies"

Describes the Policies tab and the use and management of policies.

#### • Part V, "Tools"

A guide to the Tools tab and the governance and repository content management features accessed from it.

## **Document Conventions**

This document uses the following typographical conventions:

run.bat make	Script name or other executable command plus mandatory arguments.			
[help]	Command-line option.			
either   or	Choice of arguments.			
replace_value	Command-line argument that should be replaced with an actual value.			
{arg1   arg2}	Choice between two command-line arguments where one or the other is mandatory.			
java -jar hpsystinet.jar	User input.			
C:\System.ini	File names, directory names, paths, and package names.			
a.append(b);	Program source code.			
server.Version	Inline Java class name.			
getVersion()	Inline Java method name.			
Shift+N	Combination of keystrokes.			
Service View	Label, word, or phrase in a GUI window, often clickable.			
ОК	Button in a user interface.			
<b>New→Service</b>	Menu option.			

## **Documentation Updates**

This guide's title page contains the following identifying information:

- Software version number, which indicates the software version
- Document release date, which changes each time the document is updated
- Software release date, which indicates the release date of this version of the software

To check for recent updates, or to verify that you are using the most recent edition of a document, go to:

#### http://h20230.www2.hp.com/selfsolve/manuals

This site requires that you register for an HP Passport and sign-in. To register for an HP Passport ID, go to:

#### http://h20229.www2.hp.com/passport-registration.html

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You will also receive updated or new editions if you subscribe to the appropriate product support service. For details, contact your HP sales representative.

## Support

You can visit the HP Software Support Web site at:

#### http://www.hp.com/go/hpsoftwaresupport

HP Software Support Online provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valued support customer, you can benefit by using the HP Software Support web site to:

- · Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
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Most of the support areas require that you register as an HP Passport user and sign in. Many also require a support contract.

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http://h20230.www2.hp.com/new\_access\_levels.jsp

To register for an HP Passport ID, go to:

http://h20229.www2.hp.com/passport-registration.html

# Part I. Getting Started

This part explains how to access SOA Systinet, the features of the user interface, and the common functions accessible from every page.

This part contains the following chapters:

- Chapter 1, Accessing the User Interface
- Chapter 2, Features of the User Interface
- Chapter 3, Managing Your Profile
- Chapter 4, Exploring the Repository

# 1 Accessing the User Interface

Before attempting to use SOA Systinet, make sure that it is running on the server you want to access.

To access the web UI, use one of the web browsers listed in "Supported Platforms" section in the *HP SOA Systinet Installation and Deployment Guide*.

Enter the URL into your browser in the form:

protocol://server:port/context/web

#### where:

- protocol is either http, or https if you want to create a secure connection using SSL.
- server, port, and context are determined during installation.

The default port is 8080 for HTTP and 8843 to use HTTPS.

#### For example:

- http://mypc:8080/soa/web
- https://ourserver:8843/soa/web

This should display the sign-in screen.

Use the credentials provided by your administrator to sign in.

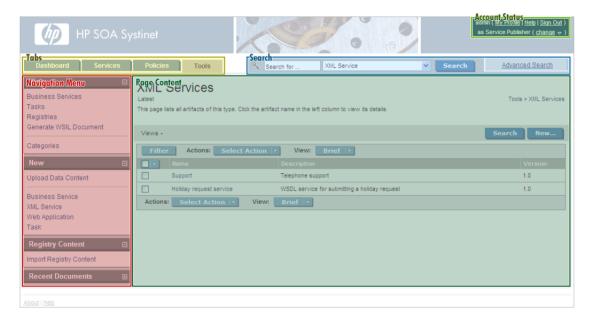
The first time you sign in, SOA Systinet displays a welcome panel.

Review the information on the panel, and click **OK** to display the **Dashboard**.

# 2 Features of the User Interface

The SOA Systinet user interface has the same look and feel throughout, as shown in Figure 1.

Figure 1. Typical SOA Systinet Page



Every page contains the following common elements:

Tabs

Access the main components of SOA Systinet, as described in Tabs on page 18.

Search

Search the repository content, as described in Full Text Search on page 24.

#### Menu

Select component-specific links from each tab, as described in Menus on page 19.

#### Account Status

Edit your user profile or view, or log out, as described in Profile Status on page 20.

#### Product Information

Access product information and user documentation.

#### Tabs

The UI is divided into functional components. At the top of every page, the tabs access these components.

Figure 2. SOA Systinet Tabs



Clicking a tab opens the main page of that component.

#### Dashboard

The first page you see when you start SOA Systinet. It contains portlets showing a customizable real-time view of your SOA. The Dashboard is described in Chapter 5, Dashboard UI.

#### Services Tab

The central location that shows all information about services, contracts, and lifecycles in one place to provide easy access and simple management. The Services tab is described in Chapter 8, Services UI.

#### Policies Tab

Enables you to validate your business services against company policy, and to manage those policies. The Policies tab is described in Chapter 13, Policies UI.

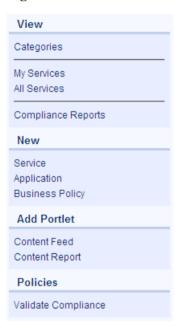
#### Tools Tab

Gives access to Information Management, offering a generic low level view of the content of SOA Systinet and access to administration and governance tools. The Tools tab is described in Chapter 17, Tools UI.

#### Menus

On the left side of each page is a section containing a menu of links specific to each SOA Systinet tab.

Figure 3. Menu



The context-specific menus for each SOA Systinet tab are described in the following sections:

- Dashboard Menu on page 35
- Services Menu on page 50

- Policies Menu on page 160
- Tools Menu on page 216

### **Profile Status**

At the upper-right of each page is a section allowing you to sign out, manage your profile, and change your perspective in SOA Systinet.

#### Figure 4. Profile Status

```
admin ( <u>My Profile</u> | <u>Help</u> | <u>Siqn Out</u> )
as Service Publisher ( <u>chanqe</u> ▽ )
```

#### My Profile

Manage your profile, as described in Chapter 3, Managing Your Profile.

#### Help

Access the product documentation.

#### Sign Out

Log off SOA Systinet.

#### Change

Move the cursor over **change** and select the perspective to alter your view of SOA Systinet.

# 3 Managing Your Profile

When you first sign in, SOA Systinet creates a user profile for you based on your account in the external user store.

Your can amend your profile details.

#### To change profile details:

- Click **My Profile** to display your profile information.
- 2 Click Edit.
- 3 The parameters are split into the following sections:

#### Basic Information

Parameter	Definition		
Name	Your profile name.		
Description	Your profile description.		
Email	The email used for notifications. Use <b>Add</b> and <b>Remove</b> for multiple entries.		
	Email can only be amended if SOA Systinet is not integrated with an LDAP/AD user store.		

#### Personal Information

Parameter	Definition
Contact Role	Select a role from the list.
Instant Messenger Your IM details. Use <b>Add</b> and <b>Remove</b> for multiple entries.	
Phone	Your phone details. Use <b>Add</b> and <b>Remove</b> for multiple entries.
Language Code Select a primary language from the list.	
Categories	Set taxonomic categories for the search purposes.

#### Group Membership

Set a Primary Group from the list if you want artifacts you create to be owned by the group you are a member of, instead of you.

#### Address Details

Your postal contact details, including Geographical Location category setting.

#### • Related Repository Artifacts

Add any required relationships to existing repository artifacts.

For details, see Adding a Relationship on page 248.

#### 4 Click **Save** to confirm the changes.

# 4 Exploring the Repository

SOA Systinet provides numerous ways to locate the service or artifact you need:

• Full text search is available on every page.

For details, see Full Text Search on page 24.

• Advanced search is available on every page.

For details, see Chapter 20, Advanced Searches.

Browsing by taxonomic category is accessible from the view menu on every page.

For details, see Category Browsing on page 27.

• The Services tab provides list views that enable you to browse and filter service artifacts by column heading.

For details, see List Views on page 56.

• The Tools tab provides browse artifact pages with more sophisticated filtering. Artifacts in a browse view can be filtered by column heading or by taxonomic categories assigned to them.

For details, see Browse Artifact Pages on page 225.

 Custom RSS views can be added to the Dashboard to provide periodically updated views of specific artifact types.

For details, see RSS Content Feed Portlets on page 38 and Chapter 6, Adding a Content Feed.

• The REST interface enables you to browse the repository.

For details, see "REST Interface" in the HP SOA Systinet Developer Guide.

- SOA Systinet integrates with IDEs, giving developers direct access to the SOA Systinet repository. For details, see "IDE Integration" in the *HP SOA Systinet Developer Guide*.
- Additional service discovery options are available to import service infrastructure into SOA Systinet.
   For details, see Chapter 10, Service Discovery.

#### **Full Text Search**

Full text search is the simplest way to find an item in the repository.



To use this functionality you must enable full text search on the database and in the configuration.

For details, see "Configuring the Database for Full Text Search" in the *HP SOA Systinet Installation* and Deployment Guide and "SOA Systinet Configuration Options" in the *HP SOA Systinet* Administrator Guide.

The search input is located at the top of every page in SOA Systinet:



**Advanced Search** is not part of full text search. It enables you to create a custom search within a particular artifact type set.

For details, see Creating an Advanced Search on page 291.

### To perform a full text search in the SOA Systinet repository:

1 Type your full text search query in the input field.

The full text query string should conform to the following rules:

- A query is a list of words, phrases, and subqueries (collectively called terms) separated by spaces or logical operators AND, OR, and NOT.
- A word is a string of characters, numbers, and some special characters.

- A phrase is a list of words enclosed by quotation marks.
- Enclose search terms including special characters in quotes.

For example, "Adam's".

- Wildcards % and \* can be used to represent zero or more arbitrary characters.
  - MSSQL only treats % and \* as wildcards at the end of words.
- Wildcard \_ represents one arbitrary character.
  - MSSQL does not support \_ as a wildcard.
- \*, \*, and \_ are not treated as wildcards in phrases.
- Logical operators AND and OR, which must be in uppercase, can be placed between terms. A space between terms is a default AND.
- Logical operator NOT, which must be in uppercase, can only be placed before a term if there is at least one preceding term connected by AND.

For example, a AND NOT b and a NOT b work, but NOT b and a OR NOT c do not work.

A subquery is a query enclosed in brackets.

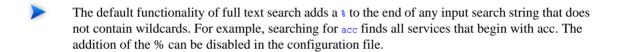
For example a AND (b OR c).

- For MSSQL, avoid searches using `(backward apostrophe).
- For MSSQL, to search for words containing < or > in XML/HTML documents, use &lt; or &gt; instead.
- 2 Optionally, select an artifact type from the drop down list to restrict your search.

#### 3 Click Search.

The results of your search appear as a listing that can be further reduced using filters, as described in Full Text Search Results on page 26.

For example, the search string: C\_st% service finds both Customer Service and Cost Pricing Service if they exist in the repository.

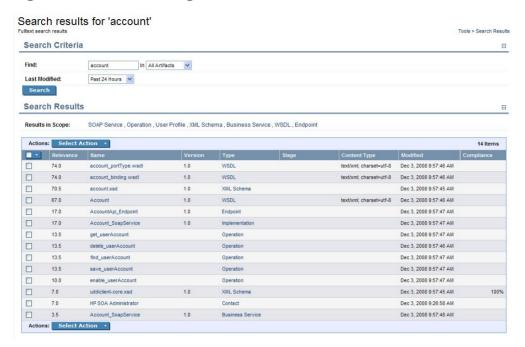


- An exception can occur in the event of a wildcard resulting in excessive search terms. If this occurs, resolve the problem with one of the following methods:
  - Remove unnecessary wildcards (%,\*,\_).
  - Prevent the implicit appending of a % by enclosing your search terms with quotes.
  - Remove unnecessary words from the expression.

### **Full Text Search Results**

You can reduce the scope of the search, as shown in Figure 5.

Figure 5. Search Results Page



Use **Last Modified in** or select a specific artifact type in Search Criteria to reduce the scope, and click **Search**.

Alternatively, click one of the artifact types next to **Results in Scope** in the **Search Results** section.

## Category Browsing

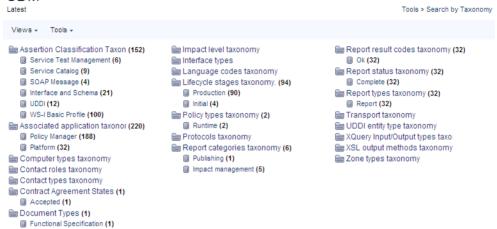
SOA Systinet enables you to search the repository based on taxonomic categories.

#### To browse by categories:

In the View section of the menu on any page in the Dashboard, Services, or Tools tabs, click **Categories**.

The SDM page appears, displaying a list of taxonomies and categories from the SOA Definition Model, and the number of artifacts in each taxonomy and category.

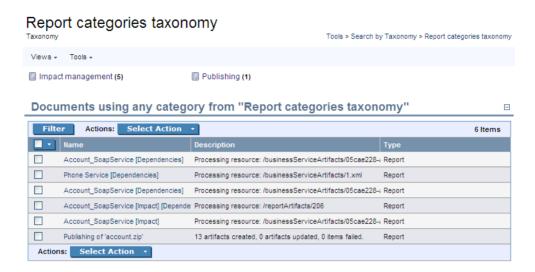






The number of items displayed next to each category in the list is approximate, and for performance reasons, is evaluated ignoring the ACLs. The number represents the cumulative number of items in all subcategories of the current category. The table displayed under the list of subcategories contains only items categorized by the current *category*. It *does not* contain items categorized by its subcategories.

Select a taxonomic category to view a list of artifacts classified by that category, or a taxonomy to view a list of all artifacts classified by those taxonomic categories and the available categories in that taxonomy.



These pages also contain context menu options, enabling you to change the page display.

#### View Menu Options:

- "All Taxonomies" displays all taxonomies in the repository.
- A set of options enabling you to select a subset of taxonomies. For example, "UDDI" displays the subset of taxonomies for UDDI registry categorization.
- "Manage Views" enables the administrator to select or edit the taxonomy views displayed in the Views menu, and to create a new taxonomy view.

#### To create a new taxonomy view:

- In the Manage Views page, click **New** to open the Create View page.
- 2 Enter a name and description for the taxonomy view.
- 3 Use add and Remove Selected to select the taxonomies to display in the view.
- 4 Set the Display Properties to control the format of the view.

5 Click **Save** to create the new taxonomy view and add it to the Views menu.

The **Tools** $\rightarrow$ **Display Properties** option enables you to change the order of the taxonomies and the number listed in each page.

The Filter and Actions functionality in the list of artifacts is the same as for Tools browse pages.

For details, see Browse Artifact Pages on page 225.

# Part II. Dashboard

This part explains the features and use of the **Dashboard**, which is the initial page that opens when you start SOA Systinet.

This part contains the following chapters:

• Chapter 5, Dashboard UI

Describes the user interface elements on the Dashboard.

• Chapter 6, Adding a Content Feed

Explains how to add a new RSS feed to the Dashboard.

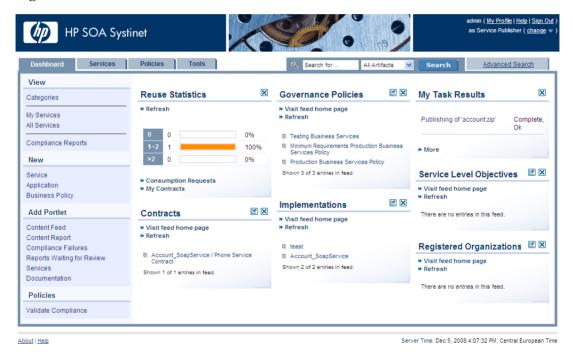
Chapter 7, Adding a Content Report

Explains how to add new report content to the Dashboard.

# 5 Dashboard UI

The Dashboard contains a customizable real-time view of your SOA data, as shown in Figure 6.

Figure 6. The Dashboard Tab



The Dashboard is divided into the menu on the left side of the page and a number of Portlets in the main section of the page.

Portlets can be dragged and dropped to customize the look of your dashboard using the mouse. You can also use the keyboard to move portlets.

#### To move portlets on the Dashboard with the keyboard:

- Press **F9** to display the movement keypad.
- 2 Use the **arrow keys** to navigate to the portlet you want to move.
- 3 Press **Enter** or **5** to select the portlet.
- 4 Use the **arrow keys** to move the portlet into position.
- 5 Press **Enter** or **5** to fix the portlet in place.
- 6 Press **F9** to exit portlet navigation mode.

#### This chapter describes:

Dashboard Menu on page 35

The items in the dashboard menu.

• RSS Content Feed Portlets on page 38

The RSS content feed portlets on the dashboard.

Reuse Statistics Portlet on page 38

Displays statistics of service use.

• My Task Results Portlet on page 39

Displays the results and progress of asynchronous tasks.

### Dashboard Menu

The Dashboard menu is split into collapsible segments.

Each segment is described in the following sections:

Dashboard View Menu on page 35

A set of links to various aspects of service and contract management.

Dashboard New Menu on page 36

Create new artifacts.

• Add Portlet Menu on page 37

Create new content feeds or add reports to the Dashboard.

Validation Menu on page 162

Validate the policy compliance of an artifact.

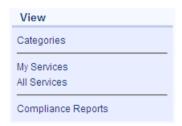
Recent Documents

Quick links to the last few artifacts viewed.

#### Dashboard View Menu

The View menu in the Dashboard provides links to list views for service, and policy management.

Figure 7. Dashboard View Menu



The View menu contains the following links:

#### Categories

Browse the repository by taxonomic category.

For details, see Category Browsing on page 27.

#### Service List Views

Views of various aspects of service management.

For details, see List Views on page 56.

#### Compliance Reports

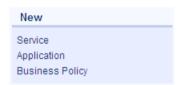
A link to the list view of policy compliance reports.

For details, see Policy and Report List Views on page 166.

#### Dashboard New Menu

The New menu in the Dashboard provides quick links to create new artifacts.

Figure 8. Dashboard New Menu



The New menu links to the following artifact creation pages:

#### Service

Create a new business service.

For details. see Creating Business Services on page 77.

## Application

Create a new application.

For details, see Using Applications on page 102.

#### Business Policy

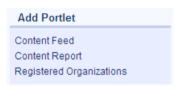
Create a new policy.

For details, see Creating Business Policies on page 185.

# Add Portlet Menu

The Add Portlet menu in the Dashboard enables you to add and restore content to the Dashboard.

Figure 9. Add Portlet Menu



The Add menu contains the following functionality:

#### Content Feed

Add a new RSS feed to the Dashboard.

For details, see Chapter 6, Adding a Content Feed.

#### Content Report

Add a new Content Feed to the Dashboard.

For details, see Chapter 7, Adding a Content Report.

#### Portlet Names

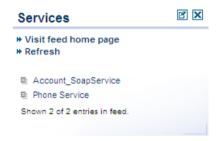
Any Dashboard portlets that you close appear in this menu.

Click the name to restore the portlet to the Dashboard.

# **RSS Content Feed Portlets**

The **Dashboard** contains a number of content feeds that use RSS subscription to display up-to-date information from a variety of sources, including the repository, as shown in Figure 10.

Figure 10. Services RSS Feed Portlet



Visit feed home page takes you to the source of the content in the portlet.

**Refresh** reloads the content list.

Clicking one of the links in the list takes you to the page showing that item.

The tool icon accesses the feed portlet configuration, where you can change the number of list items and the update frequency.

To remove the portlet from the Dashboard, click the window close icon [X].

To find out how to add new portlets to the Dashbaord, see Chapter 6, Adding a Content Feed.

Closing a portlet in the Dashboard makes it available in the "Add" section of the Dashboard menu.

# Reuse Statistics Portlet

Contract Manager provides basic statistics of service use in the Reuse Statistics portlet on the Dashboard.

Figure 11. Reuse Statistics Graph



The statistics show the percentage of services used by a given number of consumers. Basic intervals are less than one, one or two, and more than two.

Click **Refresh** to reload the service statistics.

Click Consumption Requests or My Contracts to open the relevant List View for that item.

For details, see List Views on page 56.

Closing the portlet makes it available in the **Add** section of the Dashboard menu.

Click one of the graph bars to view the services that fit the selected criteria. For each service, the table lists all consumers.

# My Task Results Portlet

The My Task Results portlet on the Dashboard tabs is the quickest access point to asynchronous tasks such as bulk operations, publishing, and BAC/UCMDB discovery and the results of their execution.

Figure 12. My Task Results Portlet



The portlet displays a list of tasks that you executed with links to the result. If a task is currently in progress, the portlet displays a progress bar.

Click the name of the task to view the report for that task.

Closing the portlet in the **Dashboard** adds a link to the **Add** section of the dashboard menu enabling you to restore the portlet to the **Dashboard** at any time.

Click More to open the My Task Results page.

This page shows a complete list of completed tasks and tasks in progress.

This page contains a bulk stop task action. Select the tasks to stop, expand **Select Action** and select **Stop** to stop the selected tasks.

For more information about asynchronous tasks see the following sections:

- Publishing Services on page 107
- BAC/UCMDB Service Discovery on page 117
- Bulk Operations on page 243

# 6 Adding a Content Feed

The **Dashboard** can display up-to-date information from external sources and from SOA Systinet.

#### To add a new RSS feed to the Dashboard:

In the Add section of the dashboard menu, click **Content Feed** to open a new content feed in the Dashboard:



2 Complete the form with the following parameters.

Parameter	Definition	
Feed URL	Address of the RSS feed  To add a feed for repository content, use the URL from one of the following views:  RSS  Access this view from the Common context menu in Browse Artifact and detail view pages. For details, see xref linkend="ui.browse"/> and Tools View on page 228.  RSS of Result  Access this view from the View context menu for a saved search.	
Title	Heading for the new feed portlet	
Entries	Number of items to list	
Update [min]	Interval between feed updates	

3 Click **Save** to access the feed and load the initial content.

# 7 Adding a Content Report

The Dashboard can display content from specially designed reports.

SOA Systinet contains a standard set of dashboard reports, which you add using SOA Systinet Report Editor. For details, see the SOA Systinet Report Editor Guide.

## To add a new content report to the Dashboard:

In the Add section of the Dashboard menu, click **Content Report** to open a new content report in the Dashboard:



- 2 Select a report from the list. If required, change the title.
- 3 Click **Save** to access the most recent report from the reporting server.
- 4 Click **Reload** to execute the associated reporting tool to generate a new version of the report.
- 5 Click the tool icon to change the title or content of the portlet.

# Part III. Services

This part shows you how to use Services tab to organize and manage your SOA services.

This part contains the following chapters:

• Chapter 8, Services UI

The user interface elements of the services tab.

• Chapter 9, Creating Services

Create services, their implementation, and make them available for use.

• Chapter 10, Service Discovery

Populate SOA Systinet with service infrastructure from external sources.

• Chapter 11, Lifecycle Governance

Create governance processes to manage your SOA.

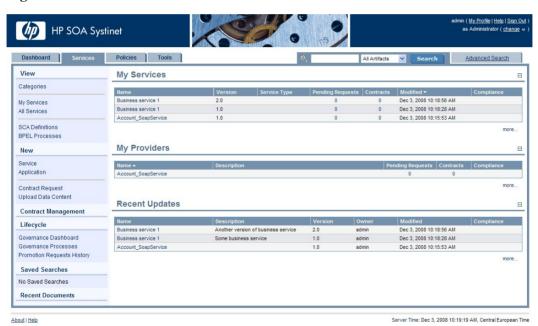
• Chapter 12, Managing Contracts

Establish and manage contracts between providers and consumers.

# 8 Services UI

The Services tab displays all information about your services and contracts in one place. From this central location, you can access and manage your services quickly and easily.

Figure 13. The Services Tab



The Services tab is divided into the menu on the left side of the page and a number of collapsible sections:

#### Services Menu

Describes the items in the Services Menu. For details, see Services Menu on page 50.

#### My Services

Displays the services that you provide that are ready for consumption.

#### My Providers

Displays the services that you use.

#### Recent Updates

Displays services that are newly available or modified.

From the Services tab, you can do one of the following:

To view details about a service in the View Service page, click the service name in these lists.

For details, see Service View on page 58.

• To open a List View for that type of artifact, click **More**.

For details, see List Views on page 56.

# Services Menu

The Services menu is divided into collapsible segments.

Each segment is described in the following sections:

Services View Menu on page 51

Set of links to various aspects of service management.

• Services New Menu on page 52

Create new service artifacts.

• Contract Management Menu on page 53

Set of links to various aspects of contract management.

# • Lifecycle Menu on page 54

Access the lifecycle functionality in SOA Systinet.

#### Service Discovery Menu on page 54

Discover and manage artifacts from an integrated BAC/UCMDB server.

# • Saved Searches Menu on page 55

Quick links to user specified searches.

#### Recent Documents

Quick links to the last few artifacts viewed.

#### Services View Menu

The View menu in the Services tab provides links to list views for service management.

Figure 14. Services View Menu

View	
Categories	
My Services All Services	
SCA Definitions BPEL Processes	

The View menu contains the following links:

#### Categories

Browse the repository by taxonomic category.

For details, see Category Browsing on page 27.

#### • Service List Views

Views of various aspects of service, lifecycle, and contract management.

For details, see List Views on page 56.

#### Artifact Names

View the Tools browse pages for these artifact types.

For details, see Browse Artifact Pages on page 225.

# Services New Menu

The New menu in the Dashboard provides quick links to create new artifacts.

Figure 15. Services New Menu



The New menu links to the following artifact creation pages:

#### Service

Create a new business service.

For details. see Creating Business Services on page 77.

# Application

Create an application artifact.

For details, see Using Applications on page 102.

#### Contract Request

Request a contract for consumption of a provided artifact.

For details, see Requesting Consumption on page 152.

#### Upload Data Content

Publish service infrastructure from a service definition document.

For details. see Publishing Services on page 107.

# Contract Management Menu

The Contract Management menu accesses list views for contract management and import functionality.

Figure 16. Contract Management Menu



The Contract Management menu contains the following links:

#### Contract List Views

Views of various aspects of contract management.

For details, see List Views on page 56.

#### Import Existing Contract

Import a contract that exists outside SOA Systinet into the repository.

For details, see Importing Existing Contracts on page 154.

# Lifecycle Menu

The Lifecycle menu in the Service tab enables you to access the lifecycle functionality in SOA Systinet.

#### Figure 17. Lifecycle Menu

# Governance Dashboard Governance Processes Promotion Requests History

The Lifecycle menu contains the following links:

#### Governance Dashboard

Opens an overview page of your current governance activity.

#### Governance Processes

Opens an overview page of all governance processes.

#### Promotion Requests History

Opens an overview page of all resolved (historical) promotion requests.

For more details, see Chapter 11, Lifecycle Governance.

# Service Discovery Menu

The Service Discovery menu provides access to services stored in products using a *Universal Configuration Management Database* (UCMDB), specifically *HP Business Availability Center* (BAC), and their representations in the SOA Systinet repository.

Figure 18. Service Discovery Menu



The Service Discovery menu contains the following links:

#### BAC/UCMDB

Discover services stored in UCMDB used by BAC.

For details, see BAC/UCMDB Service Discovery on page 117.

#### Discovered Service List Views

List views of services accessed from BAC/UCMDB and processed in SOA Systinet.

For details, see BAC/UCMDB Service Discovery on page 117.

# Saved Searches Menu

The Saved Searches menu in the Services tab contains quick links to user created saved searches.

Figure 19. Saved Searches Menu



The Saved Searches menu enables you to view and open saved searches:

Saved Search Names

Click a stored search name to execute the search and view the search results . For details, see Chapter 20, Advanced Searches.

#### More

Click **More** to view the full list of saved searches.

# Service Pages

The Services tab contains two types of view pages, described in the following sections:

List Views on page 56

Describes the index views of service artifacts.

Service View on page 58

Describes the detailed view of service related artifacts in the Service Catalog.

Governance Dashboard on page 67

Describes the lifecycle management page displaying an overview of your approval requests.

# List Views

Click one of the links in the Services tab View menu to open a list view of that type of artifact.

For example, My Services:

# Figure 20. My Services List View

#### My Services



You can reduce the list of artifacts using **Filter**.

Click **Filter** to open a query window.

To filter the list, enter your search parameter, select a column, and then click **Find**.

Click **Clear Filter** to remove the filter and restore the list of artifacts, or open the Filter menu and select **Edit Filter** to change the filter terms.

List views also enable you to carry out bulk operations on selected artifacts using the **Actions** menu.

The available bulk operations vary depending on the artifact type.

#### To perform a bulk operation:

• Select the service artifacts you require, and open the **Select Actions** menu.

The menu offers the following bulk operations:

#### • Edit Access Rights

The owner of an artifact or administrator can edit the permissions of selected artifacts.

For details, see "Access Rights" in the HP SOA Systinet Administrator Guide.

#### Edit Category Bag

Change the categorization for the selected artifacts.

For details, see Categorizing Artifacts on page 252.

#### Change Owner

Change the person or group responsible for the artifact.

For details, see Changing Artifact Ownership on page 249.

#### Synchronize

Perform change management on the selected artifacts.

For details, see Running the Synchronization Tool on page 279.

#### Change Version

Create new versions of the selected artifacts.

For details, see Managing Versions on page 259.

#### Delete

Mark the selected artifacts as deleted.

For details, see Deleting an Artifact on page 247.

## • Export to Registry

Export the selected artifacts to an integrated UDDI Registry.

For details, see Exporting Data To Registry on page 265.

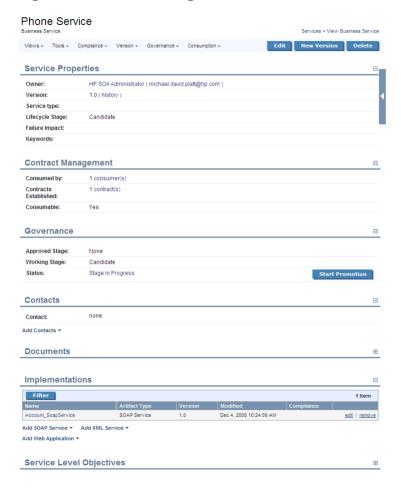
#### Service View

Clicking the name of a service artifact in the Services tab opens the service view for that artifact:



For the purposes of documentation, service artifact refers to any artifact type that is available to view in the Services tab. These include applications, business services, implementations, endpoints, and operations.

Figure 21. View Service Page



The service view is the central location for information about service artifacts.

This following sections describe the content and functionality of these pages:

Service View Context Actions on page 60

- Service View Page Content on page 63
- Sidebar on page 66

#### Service View Context Actions

The grey bar contains a set of context action menus and functions.

The actions vary depending on the artifact but they include:

#### Views:

#### Consumer View and Services View

Switch between the default view of the current revision and the last approved revision of the artifact for artifacts subject to lifecycle management.

For more details, see Chapter 11, Lifecycle Governance.



This view selection is preserved if you navigate away from the page.

#### Advanced View

Switches to the detailed view of the artifact in the Tools tab.

For details, see Tools View on page 228

#### Navigator View

Opens a graphical representation of the artifact and its relationships.

For details, see Navigator View on page 236.

#### Revisions

View the revision history of the artifact.

For details, see Revision and Version History on page 238.

#### Access Rights

Opens a view of the access permissions for the artifact.

For details, see "Edit Access Rights" in the HP SOA Systinet Administrator Guide.

#### Tools:

#### Related Reports

A list of the reports related to this artifact.

For details, see Reports on page 288.

#### Dependency Analysis and Impact Analysis

Execute the impact management tool on the artifact.

For details, see Impact Tools on page 272.

#### Change Owner

The administrator or owner of the artifact to can transfer ownership to a different user.

For details, see Changing Artifact Ownership on page 249.

# Compliance:

#### Validate Compliance

Validate the policy compliance of an artifact.

For details, see Chapter 16, Validating Artifacts.

#### Compliance Status

View the compliance status of the artifact.

For details, see Report Views on page 175.

#### Effective Policies

View the business policies associated with the service artifact.

#### Reset Compliance Statistics

Delete all compliance reports associated with the artifact.

#### Version:

#### Versions

View the version history for the artifact.

For details, see Revision and Version History on page 238.

#### Version Navigation

Open specific next, previous, or last versions of the artifact.

#### Governance

#### Start Governance

Enter the artifact into a lifecycle process.

For details, see Starting Artifact Governance on page 141.

#### Start Promotion

Request artifact promotion to the next lifecycle stage.

For details, see Submitting a Promotion Request on page 143.

#### View Stage Details

View the page showing the details for the current lifecycle stage.

#### Promotion History

View the promotion request and voting details for each previous lifecycle stage.

#### • Consumption:

#### New Request

Request consumption of the artifact.

For details, see Submitting a Promotion Request on page 143.

#### Pending Requests

View the list of outstanding consumption requests for the artifact.

#### Accepted Requests

View the list of accepted consumption requests for the artifact.

#### Rejected Requests

View the list of rejected requests for the artifact.

#### Edit

Change the attributes of the artifact.

#### New Version

Create a new version of the artifact.

For details, see Managing Versions on page 259.

#### Delete

Mark the artifact as deleted with a further option to purge it from the repository.

#### Service View Page Content

The service view page contains a set of collapsible segments specific to each artifact type:

#### Properties

Information about the service artifact specific to the artifact type.

#### Contract Management

Service artifacts that are *providers* display contract information.

For details, see Chapter 12, Managing Contracts.

#### Governance

Service artifacts subject to lifecycle management display the last approved stage and the current stage with options to view the stage details, view changes since the last approved version, and to start promotion to the next lifecycle stage.

For details, see Chapter 11, Lifecycle Governance.

#### Environments

This section for SOAP Services displays information about the environments and endpoints associated with the SOAP Service. The section is organized by environment which usually represent specific stages in a service lifecycle and the endpoints associated with the implementations servers used during those stages.

For more details, see Adding Endpoints on page 93.

#### Related Artifacts Sections

SOA defines a set of relationships between service artifacts. These sections, including **Documents**, **Implementations**, **Service Level Objectives**, **Environments**, and **Operations** enable you to manage these relationships.

For more details, see Chapter 9, Creating Services.

#### Registries

If you integrate SOA Systinet with UDDI Registries, this section displays each registry and the status of the service artifact compared to that registry. There are synchronization options depending on the relative status of the artifact with each registry.

For details, see Registry Integration on page 263.

#### Service Quality

If you integrate SOA Systinet with *HP Service Test Manager* (STM), SOAP Services display a section for service quality statistics from STM.

This section enables you to register a service with STM and then displays information about requirements, tests, and defects from STM.

For details, see Service Test Manager Integration Features on page 73.

#### Service Discovery

If you import a service artifact from an external source, such as *HP Business Availability Center* (BAC), this section displays the source of the original service and its change management status. There are options to display the discovery details, or import changes.

For details, see Synchronizing Discovered Services on page 123.

#### Performance and Availability

The content of this section depends on which product you integrate SOA Systinet with.

• If you integrate SOA Systinet with *HP Business Availability Center* (BAC), this section displays statistics generated by BAC and enables you to open the BAC view of the service artifact.

For integration details, see "Setting Up BAC/UCMDB Integration" in the *HP SOA Systinet Administrator Guide*.

For feature details, see BAC/UCMDB Integration Features on page 68.

• If you integrate SOA Systinet with *HP SOA Policy Enforcer* (SPE), this section enables you to open the SPE view of the service artifact if it is shared with SPE.

For integration details, see "Setting Up SOA Policy Enforcer Integration" in the *HP SOA Systinet Administrator Guide*.

For feature details, see SOA Policy Enforcer Integration Features on page 71.

#### Sidebar

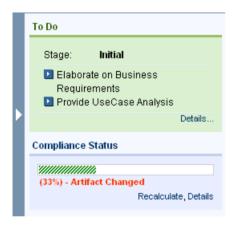
Additional information about an artifact may be available in the Sidebar to the right of the Service View.

Open and close the sidebar by clicking the white arrow.



If there is no relevant information, the Sidebar is not visible.

Figure 22. Sidebar



The Sidebar contains the following sections when there is relevant information available:

#### To Do

Displays outstanding and untracked tasks for a governed artifact for its current lifecycle stage.

Select the check-box for an outstanding task to mark it as completed.

Click **Details** to view the Stage Details page for the artifact.

For more details about lifecycle tasks, see Managing Associated Policies and Tasks on page 142.

# Compliance Status

Displays the current compliance status of the artifact. The compliance status is shown in parentheses if the status is obsolete due to a change to the artifact.

If the compliance status is obsolete or unknown, click **Recalculate** to execute a compliance check and refresh the compliance status.

Click **Details** to view the latest compliance status report.

For details about artifact compliance, see Compliance Status on page 204.

Expand and contract sections of the Sidebar by clicking the section name.

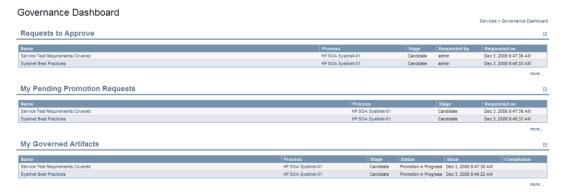
# Governance Dashboard

The Governance Dashboard page is part of lifecycle management displaying an overview of promotion requests and governed artifacts relevant to you.

Access the page from the Services tab Lifecycle menu with the Governance Dashboard link.

The page is split into the following sections displaying different stages of service and lifecycle approvals, as shown in Figure 23.

Figure 23. Governance Dashboard



#### Requests to Approve

Displays a list of change requests that require your attention. These requests are associated with services at a lifecycle stage that you are the approver for. Click a request to review it and approve or reject.

For details, see Handling Promotion and Rollback Requests on page 145.

#### My Pending Promotion Requests.

Displays your outstanding change requests that require review by the relevant approvers.

#### My Governed Artifacts.

Displays a list of all artifacts currently under governance.

# **BAC/UCMDB** Integration Features

HP Business Availability Center (BAC) monitors run-time services and collects statistics their perfromance. These statistics enable you to verify that a service meets its service level objectives. BAC uses a Universal Configuration Management Database (UCMDB).

SOA Systinet enables you to discover services stored in BAC/UCMDB.

For details about BAC/UCMDB service discovery, see BAC/UCMDB Service Discovery on page 117



Before any data transfer takes place between SOA Systinet and BAC/UCMDB, a BAC/UCMDB server artifact must be created.

For details, see "Setting Up BAC/UCMDB Integration" in the *HP SOA Systinet Administrator Guide*.

SOA Systinet artifacts correspond to UCMDB entities as follows:

SOA Systinet Artifact	UCMDB Entity	
Organizational unit	Business Unit	
Business Service	Business Service for Catalog	
SOAP Service	Web Service	

BAC/UCMDB cannot access services directly from SOA Systinet. You must integrate a UDDI Registry with SOA Systinet and UCMDB enables you to access the service entities in the UDDI Registry.

For details, see "Setting Up Registry Integration" in the *HP SOA Systinet Administrator Guide* and the *HP Business Availability Center* documentation.

Any service artifact monitored by BAC has an extra section in Services and Tools detail pages:

Figure 24. Performance and Availability Section

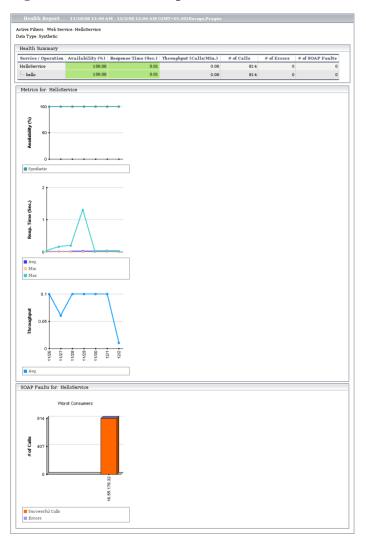


The Performance and Availability section displays statistics generated by BAC for the default time period. Select **Data Source** to refresh the information for the selected time period. Clicking **View Report in BAC** to display the BAC report for the selected time period.



The default time period is Past Week. You can change this default in the configuration. For details, see "Configuring the Default BAC Reporting Period" in the *HP SOA Systinet Administrator Guide*.

Figure 25. BAC Health Report



This report is generated from synthetic data. Use BAC to view reports on real data. For more details, see the *HP Business Availability Center* documentation.

# **SOA Policy Enforcer Integration Features**

*HP SOA Policy Enforcer* (SOA PE) enables you to monitor the confomance of your run-time services against your business policy.

If you integrate SOA Systinet with (SOA PE), the service information in SOA PE is accessible from the SOA Systinet service view and SOA PE statistics are displayed for SOAP services..

Before you can access services in SPE from SOA Systinet, an SOA Policy Enforcer Server artifact must be created.

For details, see "Setting Up SOA Policy Enforcer Integration" in the *HP SOA Systinet Administrator Guide*.

After SOA PE integration is complete, policies you create in SOA PE are published directly to the SOA Systinet repository.

For details, see the HP SOA Policy Enforcer documentation.

SOA Systinet artifacts correspond to SPE entities as follows:

SOA Systinet Artifact	SOA PE Entity	
WS-Policy	Policy	
Business Service	Business Service	
SOAP Service	Web Service	

Services shared by SOA Systinet and SOA PE must have the same *QName*, defined by the namespace of the WSDL describing the service and the local name stated in the wsdl-service-name element.

Apart from the SOA PE policy publishing, there is no direct import or export functionality between SOA PE and SOA Systinet. You must integrate a UDDI Registry with SOA Systinet and SOA PE enables you to access the service entities in the UDDI Registry.

For details, see "Setting Up Registry Integration" in the *HP SOA Systinet Administrator Guide* and the *HP SOA Policy Enforcer* documentation.

Services and SOAP Services have an extra section in their service view:

Figure 26. Performance and Availability Section

Performance and Availability		
Availability(%):	100	
Average Response Time (millisec.):	78	
Minimum Response Time (millisec.):	31	
Maximum Response Time (millisec.):	297	
Throughput(req/sec):	0.01	
# of Requests:	10	
# of Success Calls:	10	
# of Failures:	0	
# of Security violations:	0	
Up Time(%):	100	
🔳 SOA Policy Enforcer service vi	w	

For shared SOAP services the section displays SOA PE statistics.

For both business services and SOAP services, click **SOA Policy Enforcer Service View** and login to SOA PE to view the Policy Enforcer view of the service:

Web Service Configuration Detail View □ 5 4 ? Monitor Configuration Web Service Configuration: MyCalculatorService 1 day Summary 글 0.04 ugh 0.02 17:50 21:50 01:50 05:50 13:50 Faults 13:50 17:50 17:50 21:50 01:50 05:50 09:50 4 Hour Summary Click The Chart DataTips for Details 1 day Summary End at 17:50 Avg Response Time(ms) 78 Success Count 10 Max Response Time(ms) 297 Availability(%) 100 Uptime(%) 100 Model Status ■ € My Calculator Service MyCalculatorService o- K entrypoint of 👼 calcBS2 ■ K webservice of 

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Figure 27. SOA Policy Enforcer Service View

### Service Test Manager Integration Features

*HP Service Test Manager* (STM) is an *HP Quality Center* component that enables you to test services in conjunction with Quality Center functionality.

SOA Systinet enables you to register SOAP services in STM for testing. Statistics for the test results are then available in the Services and Tools detail pages for SOAP services.



Before any data transfer takes place between SOA Systinet and STM, an STM server artifact must be created.

For details, see "Setting Up STM Integration" in the HP SOA Systinet Administrator Guide.

SOA Systinet artifacts correspond to STM entities as follows:

SOA Systinet Artifact	STM Entity
SOAP Service	Web Service

After an STM server has been integrated with SOA Systinet, you can register SOAP services in STM.

SOAP Services have an extra Service Quality section in their Service and Tools detail view:

Figure 28. Service Quality Section



Expand **Register in STM** and click the STM server to export the SOAP service to.



The SOAP service you want to register must be created in SOA Systinet by uploading a WSDL that defines it.

For details, see Publishing Services.

The service is registered in STM using a URL pointing to an environment specific WSDL containing only endpoints (wsdl:port elements) for the specified STM Server environment. For more details, see the **Download WSDL** functionality in Adding Endpoints on page 93. If the STM server is not categorized for an environment then the original WSDL content is used.

You must log in to Quality Center and the STM services page opens.

- To be able to register services in STM you must install this *HP Quality Center* plug-in on the client:
  - Service Test Add-in for Quality Center 9.50

Microsoft Internet Explorer must be the default browser when accessing STM.

Access STM and allow the client code to install (ActiveX) to the browser.

A registered SOAP service displays testing statistics in the Service Quality section:

Figure 29. Service Quality Section



Use the requirement, test and defect links to open the relevant pages in STM.

STM enables you to import services directly from SOA Systinet. For details, see the STM documentation.

# 9 Creating Services

Service creation is one of the most important aspects of SOA Systinet.

SOA Systinet makes service creation simple by breaking the process down into a set of basic procedures:

This section assumes that Business Service is your primary service artifact for organizing your SOA. SOA Systinet also enables you to manage your SOA at a higher level using Applications or at a lower level using Operations.

For details, see Using Applications on page 102 and Using Operations on page 104.

- Creating Business Services on page 77
- Adding Contacts on page 79
- Adding Service Documentation on page 79
- Implementing Services on page 82
- Adding Service Level Objectives on page 99
- Making Services Available on page 102

# **Creating Business Services**

You can create new business services from the Dashboard or the Services tab.

### To publish a new service:

In the Dashboard or Services tab New menu, click **Service** to open the New Business Service page:

### New Business Service



### 2 Enter the following parameters:

Parameter	Definition
Name	The name of the new business service.
Description	A description of the new service.
Version	The initial version number of the service.
Failure Impact	Select an impact from the drop-down list.
Keywords	Optionally, add search terms for the service.
Contact	Optionally, click <b>Select Contact</b> to select a service contact from the list. For more details, see Adding Contacts on page 79.
Consumable	Select to make the service available to consumers (not visible in the <b>General</b> perspective).

3 Click **Save** to create the business service artifact.

# **Adding Contacts**

SOA Systinet enables you to add contacts in specified roles for a service.

#### To add contacts for a service:

- In the Services view of a service, in the Contacts section, place the cursor over **Add Contact** to view the available contact roles.
- 2 Select a role for the new contacts.
- 3 Use Filter to search for the required contacts, select the contacts required, and click Add to add the contacts in the selected role.
- The available contact roles are determined by taxonomy uddi:systinet.com:soa:model:taxonomies:jobRoles.

Use HP SOA Systinet Workbench Taxonomy Editor if you require different job roles. For details, see the *HP SOA Systinet Taxonomy Editor Guide*.

There is a limitation on category values of 32 characters for this taxonomy.

# Adding Service Documentation

Services often have associated documentation.

#### To add documentation to a service:

- In the Services view of a service, in the Documentation section, place the cursor over **Add Document** to view the following options:
  - From Local File

Upload a document from your local file system.

For details, see To upload a document from your local file system:

#### From Remote File

Upload a document from a remote location.

For details, see To upload a document from a remote location:

#### · Link to a Remote File

Create a link to a document on a remote location.

For details, see To link to a document on a remote location:

### From Catalog

Select a document from the collection in the repository.

For details, see To select from the list of the documentation artifacts in the repository:.

### To upload a document from your local file system:

- In the Services view of a service place the cursor over **Add Document** for view the available options.
- 2 Click **From Local File** to open the Local File dialog box.
- 3 Input the following parameters:

Parameter	Definition
File	Input a path or use <b>Browse</b> to locate the file on your local file system.
Туре	Select a document type from the drop-down list.
Description	Input a description of the documentation artifact.

### 4 Optionally, expand **Show Advanced Options** and select the following options:

Parameter	Definition	
Server Folder	Input a directory name to store the uploaded document in the repository.	
	<b>View Server Folders</b> enables you to browse the existing locations.	

Parameter	Definition
Name	Input a name for the documentation artifact.

5 Click **Save** to upload the document, create a new documentation artifact, and create the relationships between the service and the documentation artifact.

### To upload a document from a remote location:

- In the Services view of a service place the cursor over **Add Document** for view the available options.
- 2 Click **From Remote File** to open the **Remote File** dialog box.
- 3 Input the following parameters:

Parameter	Definition	
URL	Input the URL of the remote document.	
Туре	Select a document type from the drop-down list.	
Description	Input a description of the documentation artifact.	

4 Optionally, expand **Show Advanced Options** and select the following options:

Parameter	Definition
Server Folder	Input a directory name to store the uploaded document in the repository.  View Server Folders enables you to browse the existing locations.
Base URL	The part of the URL location to ignore when creating the publishing location.
Name	Input a name for the documentation artifact.
Synchronization	Select a synchronization policy for change management. For more details, see Synchronization Policy on page 278.

5 Click **Save** to import the document, create a new documentation artifact and the relationships between the service and the documentation artifact.

#### To link to a document on a remote location:

- In the Services view of a service place the cursor over **Add Document** for view the available options.
- 2 Click **Link to a Remote File** to open the Link to a Remote File dialog box.
- 3 Input the following parameters:

Parameter	Definition	
URL	Input the URL of the remote document.	
Туре	Select a document type from the drop-down list.	
Name	Input a name for the documentation artifact.	
Description	Input a description of the documentation artifact.	

4 Click **Save** to create a new documentation artifact with a link to the remote document and the relationships between the service and the documentation artifact.

### To select from the list of the documentation artifacts in the repository:

- In the Services view of a service place the cursor over **Add Document** for view the available options.
- 2 Click **From Catalog** to open the Browse Catalog dialog box.
- 3 Use Find to search for the required documentation artifact and click add to select the document from the list.

# Implementing Services

Business services are implemented in the Services tab.

The Services view of a business service contains an **Implementation** section:

### Figure 30. Implementations Section

Implementations =

Filter					1 Item
Name	Artifact Type	Version	Modified	Compliance	
FTP Web Service	SOAP Service	1.0	Nov 16, 2008 4:32:25 PI	М	edit   remove

Add SOAP Service ▼ Add XML Service ▼ Add Web Application ▼

You can add the following implementations types:

#### Add SOAP Service

for details, see Adding SOAP Services on page 83.

#### Add XML Service

For details, see Adding XML Services on page 87.

#### Add Web Application

For details, see Adding Web Applications on page 89.

A SOAP Service is normally defined by attaching a WSDL document to it.

For details, see Adding WSDLs on page 91.

Implementations also require the creation of an endpoint to access the environment hosting the service. For details, see Adding Endpoints on page 93.

Implementations consist of a set of methods represented in SOA Systinet as operations. For details, see Adding Operations on page 95.

XML services can also be defined with an XML schema document. For details, see Adding an XML Service Definition on page 97.

### Adding SOAP Services

A common implementation of a business service is a SOAP service.

### To add a SOAP service to a business service:

• In the Services view of a service, in the Implementations section, place the cursor over **Add SOAP** service to view the following options:

#### Add New SOAP Service

Create a new SOAP service associated with the business service.

For details, see To create a new SOAP Service:

#### From Local File

Add a SOAP service defined by a WSDL in a local file system.

For details, see To add a SOAP service from your local file system:

This process uses the publisher functionality.

For details, see Publishing Services on page 107.

#### • From Remote File

Add a SOAP service defined by a WSDL in a remote location.

For details, see To add a SOAP service from a remote location:

This process uses the publisher functionality.

For details, see Publishing Services on page 107.

#### From Catalog

Select a SOAP service already in the repository.

For details, see To select a SOAP service from the repository:

#### To create a new SOAP Service:

- In the Services view of the service, in the Implementations section, place the cursor over the **Add SOAP Service** to view the available options.
- 2 Click **Add New SOAP Service** to open the New SOAP Service page.
- 3 Input the following parameters:

Parameter	Definition
Name	The name of the new SOAP service artifact.
Description	A description of the SOAP service artifact.
Version	A version number for the SOAP service artifact.
Consumable	Select to make the service available to consumers (not visible in the <b>General</b> perspective).

4 Click **Save** to create the new SOAP service and the relationships with the business service.



This process only creates a SOAP service artifact. You must add a WSDL and then an endpoint to the artifact in the service view of the SOAP service to make it a functioning implementation.

For details, see Adding WSDLs on page 91.

### To add a SOAP service from your local file system:

- In the Services view of a service, in the Implementations section, place the cursor over **Add SOAP service** to view the available options.
- 2 Click **From Local File** to open the Local File dialog box.
- 3 Input the path or use **Browse** to locate the WSDL file on your local file system.

- You can reference a zip file containing several WSDLs, including referenced schemas.
- 4 Input a Server Folder directory location to store the uploaded document in the repository. **View Server Folders** enables you to browse the existing locations.
- 5 Expand **Show Advanced Options** and select the Remove Unsynchronized artifact options to remove relationships from previously related artifacts that are no longer defined in the new WSDL.
- 6 Click **Save** to start the publication process for the implementations contained in the WSDL file.
- 7 Depending on the content of the file the following additional pages may appear:
  - a If an archive contains multiple WSDLs, select the WSDLs to publish and then click **Next**.
  - b If the selected WSDLs define multiple services, select the services to create and then click **Next**.
- 8 Review the artifacts to be created, and then click **Finish**.

The Services view of the service re-opens displaying the progress of the publishing task.

#### To add a SOAP service from a remote location:

- In the Services view of a service, in the Implementations section, place the cursor over **Add SOAP** service to view the available options.
- 2 Click **From Remote File** to open the Remote File dialog.
- 3 Input the url of the remote WSDL file.
  - You can reference a zip file containing several WSDLs, including referenced schemas.
- 4 Input a Server Folder directory location to store the uploaded document in the repository. **View Server Folders** enables you to browse the existing locations.

5 Expand **Show Advanced Options** and complete the dialog with parameters:

Parameter	Definition
Base URL	The part of the URL location to ignore when creating the publishing location.
Synchronization	Select a synchronization policy for change management. For more details, see Synchronization Policy on page 278.
Remove Unsynchronized	Select to remove relationships from previously related artifacts that are no longer defined in the new WSDL.

- 6 Click **Upload** to start the publication process for the implementations contained in the WSDL file.
- 7 Depending on the content of the file the following additional pages may appear:
  - a If an archive contains multiple WSDLs, select the WSDLs to publish and then click **Next**.
  - b If the selected WSDLs define multiple services, select the services to create and then click **Next**.
- 8 Review the artifacts to be created, and then click **Finish**.

The Services view of the service re-opens displaying the progress of the publishing task.

### To select a SOAP service from the repository:

- In the Services view of a service, in the Implementations section, place the cursor over **Add SOAP** service to view the available options.
- 2 Click **From Catalog** to view a list of SOAP services in the repository.
- 3 Click **add** next to the SOAP service you require to associate it with the business service.

### Adding XML Services

You can also associate a business service with an XML service artifact.

#### To add an XML service to a business service:

In the Service view of a service, in the Implementations section, place the cursor over Add XML
 Service to view the following options:

#### New XML Service

Create a new XML service to associate with the business service.

For details, see To create a new XML service:

#### From Catalog

Select an XML service already in the repository.

For details, see To select an XML service from the repository:.

#### To create a new XML service:

- In the Service view of a service, in the Implementations section, place the cursor over **Add XML Service** to view the available options.
- 2 Click **New XML Service** to open the New XML Service page.
- 3 Input the following parameters:

Parameter	Definition
Name	The name of the new XML Service artifact.
Description	A description of the XML Service artifact.
Version	A version number for the XML Service artifact.
Consumable	Select to make the service available to consumers (not visible in the <b>General</b> perspective).

4 Click **Save** to create the new XML service artifact and the relationships with the business service.

This process only creates an XML service artifact. You must add an endpoint to the artifact in the service view of the XML service to make it a functioning implementation.

For details, see Adding Endpoints on page 93.

An XML schema document can also be added to an XML service.

For details, see Adding an XML Service Definition on page 97.

#### To select an XML service from the repository:

- In the Service view of a service, in the Implementations section, place the cursor over **Add XML**Service to view the available options.
- 2 Click **From Catalog** to view a list of XML services in the repository.
- 3 Click **add** next to the XML service you require to associate it with the business service.

### Adding Web Applications

You can associate the business service with a web application artifact.

### To add a web application to a service:

- In the Services view of the service, in the Implementations section, place the cursor over the **Add Web Application** to view the following options:
  - New Web Application

Create a new web application associated with the business service.

For details, see To create a new web application:

#### From Catalog

Select a web application already in the repository.

For details, see To select a web application from the repository:

### To create a new web application:

- In the Services view of the service, in the Implementations section, place the cursor over the **Add Web Application** to view the available options.
- 2 Click **New Web Application** to open the New Web Application page.
- 3 Input the following parameters:

Parameter	Definition
Name	The name of the new web application artifact.
Description	A description of the web application artifact.
Version	A version number for the web application artifact.
Consumable	Select to make the service available to consumers (not visible in the <b>General</b> perspective).

4 Click **Save** to create the new web application and the relationships with the business service.



This process only creates an web application artifact. You must add an endpoint to the artifact in the service view of the web application to make it a functioning implementation.

For details, see Adding Endpoints on page 93.

### To select a web application from the repository:

- In the Services view of the service, in the Implementations section, place the cursor over the **Add Web Application** to view the available options.
- 2 Click **From Catalog** to view a list of web applications in the repository.
- 3 Click **add** next to the web application you require to associate it with the business service.

### Adding WSDLs

A SOAP service is normally defined by a WSDL.

#### To add a WSDL to a SOAP service:

In the Service view of a SOAP service, in the SOAP Service Properties section, expand Upload WSDL to view the following options:

#### From Local File

Add a WSDL from the local file system.

For details, see To add a WSDL from your local file system:

This process uses the publisher functionality.

For details, see Publishing Services on page 107.

#### From Remote File

Add a WSDL from a remote location.

For details, see To add a WSDL from a remote location:



This process uses the publisher functionality.

For details, see Publishing Services on page 107.

### To add a WSDL from your local file system:

In the Services view of a SOAP service, in the SOAP Service Properties section, expand **Upload WSDL** to view the available options.

- 2 Click **From Local File** to open the Local File dialog box.
- 3 Input the path or use **Browse** to locate the WSDL file on your local file system.
  - You can reference a zip file containing several WSDLs, including referenced schemas.
- Input a Server Folder directory location to store the uploaded document in the repository. **View Server Folders** enables you to browse the existing locations.
- 5 Expand **Show Advanced Options** and select the Remove Unsynchronized artifact options to remove relationships from previously related artifacts that are no longer defined in the new WSDL.
- 6 Click **Save** to start the publication process for the implementations contained in the WSDL file.
- 7 Depending on the content of the file the following additional pages may appear:
  - a If an archive contains multiple WSDLs, select the WSDLs to publish and then click **Next**.
  - b If the selected WSDLs define multiple services, select the services to create and then click **Next**.
- 8 Review the WSDLs, services, and artifacts to be published, and then click  $\pmb{\mathsf{Finish}}$ .

The Services view of the service re-opens displaying the progress of the publishing task.

#### To add a WSDL from a remote location:

- In the Services view of a SOAP service, in the SOAP Service Properties section, expand **Upload WSDL** to view the available options.
- 2 Click **From Remote File** to open the Remote File dialog.
- 3 Input the url of the remote WSDL file.
  - You can reference a zip file containing several WSDLs, including referenced schemas.

- 4 Input a Server Folder directory location to store the uploaded document in the repository. **View Server Folders** enables you to browse the existing locations.
- 5 Expand **Show Advanced Options** and complete the dialog with parameters:

Parameter	Definition
Base URL	The part of the URL location to ignore when creating the publishing location.
Synchronization	Select a synchronization policy for change management. For more details, see Synchronization Policy on page 278.
Remove Unsynchronized	Select the artifact options to remove relationships from previously related artifacts that are no longer defined in the new WSDL.

- 6 Click **Upload** to start the publication process for the implementations contained in the WSDL file.
- 7 Depending on the content of the file the following additional pages may appear:
  - a If an archive contains multiple WSDLs, select the WSDLs to publish and then click Next.
  - b If the selected WSDLs define multiple services, select the services to create and then click **Next**.
- 8 Review the WSDLs, services, and artifacts to be published, and then click **Finish**.

The Services view of the service re-opens displaying the progress of the publishing task.

After you add a WSDL, the function changes to **Update WSDL**, enabling you to change the WSDL associated with the SOAP Service as required.

### Adding Endpoints

Implementations require an endpoint artifact to locate the actual implementation of the service.

During a service lifecycle, a number of different endpoints may be required to represent the different environments hosting the service, for example, development, testing, and production servers.

### To add an endpoint to an implementation:

- In the Services view of an implementation, in the Environments section, click **Add Endpoint** to open the **Create New Endpoint** dialog.
- 2 Input the following parameters:

Parameter	Definition
Name	The name of the new endpoint
Description	A description of the endpoint
Version	A version number for the endpoint artifact.
Environment	If the endpoint is associated with a specific stage in the service lifecycle, select an environment from the drop-down list.
Endpoint Address	The URL for the actual implementation of the service
WSDL Port Name	Port name defined by an associated WSDL.
Consumable	Select to make the service available to consumers (not visible in the <b>General</b> perspective).

3 Click **Save** to create the new endpoint and the relationships with the implementation.

The new endpoint is added to the Environments section.

Figure 31. Environments Section



The environments section is arranged by environment category, which is normally associated with a particular lifecycle stage.

Each environment category, contains a table of endpoints associated with implementation servers used at that particular stage.

The following functionality is available for environments and endpoints:

#### Download WSDL

Creates a version of the WSDL, using the WSDL directly associated with the SOAP Service, and adds appropriate definitions for the endpoints categorized for a particular environment.

#### Clone

Enables you to create a copy of a particular endpoint, with an option to amend any properties.

### Adding Operations

Implementations consist of a set of *methods* with specific functionality. These are represented in SOA Systinet by operations.

### To add an operation to an implementation:

• In the Service view of an implementation, in the Operations section, place the cursor over Add Operation to view the following options:

### New Operation

Create a new operation to associate with the implementation.

For details, see To create a new operation:

### From Catalog

Select an operation already in the repository.

For details, see To select an operation from the repository:.

### To create a new operation:

- In the Service view of an implementation, in the Operations section, place the cursor over Add Operation to view the available options.
- 2 Click **New Operation** to open the New Operation page.
- 3 Input the following parameters:

Parameter	Definition
Name	The name of the new operation
Description	A description of the operation
Consumable	Select to make the service available to consumers (not visible in the <b>General</b> perspective).

4 Click **Save** to create the new operation and the relationships with the implementation.

### To select an operation from the repository:

- In the Service view of an implementation, in the Operations section, place the cursor over Add Operation to view the available options.
- 2 Click **From Catalog** to view a list of operations in the repository.
- 3 Click **add** next to the operation you require to associate it with the implementation.

### Adding an XML Service Definition

XML service implementations can be defined by an XML schema document.

#### To add a definition to an XML service:

• In the Service view of an XML service, in the Definitions, place the cursor over **Add Definition** to view the following options:

#### From Local File

Upload an XSD file from your local file system.

For details, see To upload an XSD file from your local file system:

#### From Remote File

Upload an XSD file from a remote location.

For details, see To upload an XSD file from a remote location:

#### From Catalog

Select an XML schema artifact from the collection in the repository.

For details, see To select an XML schema from the repository:

### To upload an XSD file from your local file system:

- In the Service view of an XML service, in the Definitions, place the cursor over **Add Definition** to view the available options.
- 2 Click **From Local File** to open the Local File dialog box.
- 3 Input the path or use **Browse** to locate the XSD file.
- 4 Input a directory location name to store the uploaded document in the repository. **View Server Folders** enables you to browse the existing locations.
- 5 Click **Save** to upload the XSD, create a new XML schema artifact and the relationships between the XML service and the XML schema artifact.

#### To upload an XSD file from a remote location:

- In the Service view of an XML service, in the Definitions, place the cursor over **Add Definition** to view the available options.
- 2 Click **From Remote File** to open the Remote File dialog box.
- 3 Input the following parameters:

Parameter	Definition
URL	Input the remote location of the file.
Server Folder	Input a directory name to store the uploaded document in the repository.  View Server Folders enables you to browse the existing locations.

4 Optionally, expand **Show Advanced Options** and input the following options:

Parameter	Definition
Base URL	The part of the URL location to ignore when creating the publishing location.
Synchronization	Select a synchronization policy for change management. For more details, see Synchronization Policy on page 278.

5 Click **Save** to upload the XSD, create a new XML schema artifact and the relationships between the XML service and the XML schema artifact.

### To select an XML schema from the repository:

- In the Service view of an XML service, in the Definitions, place the cursor over **Add Definition** to view the available options.
- 2 Click **From Catalog** to view a list of XML schema artifacts in the repository.
- 3 Click **add** next to the XML schema you require to associate it with the XML service.

# Adding Service Level Objectives

Most services are offered with a set of terms describing the levels of performance the service provider expects to meet.



This section describes adding an SLO to a business service. The functionality is the same for any artifact that is defined as a provider.

### To add a service level objective to a service:

- In the Services view of a service, in the Service Level Objectives section, place the cursor over **Add SLO** to view the following options:
  - New SLO

Create a new service level objective to associate with the service.

For details, see To create a new service level objective:

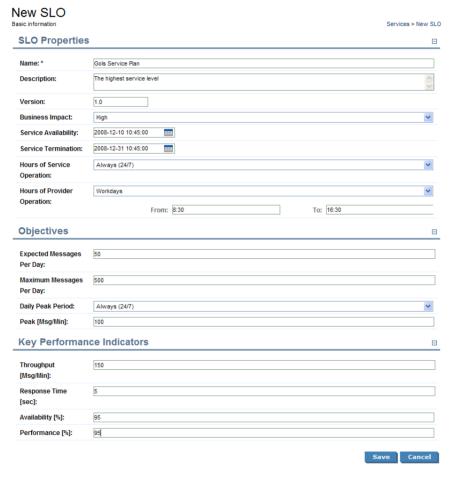
#### From Catalog

Select a service level objective already in the repository.

For details, see To select a service level objective from the repository:

### To create a new service level objective:

- In the Services view of a service, in the Service Level Objectives section, place the cursor over **Add SLO** to view the available options.
- 2 Click **New SLO** to open the New SLO page:



3 Input the following parameters which are split into sections:

### **SLO Properties**:

Parameter	Definition
Name	The name of the new SLO artifact.
Description	A description of the SLO artifact.
Version	The initial version number for the SLO.
Business Impact	Select an impact from the list.
Service Availability	Expected time of service delivery.
Service Termination	Expected time of service termination.
Hours of Service Operation	Select an option from the list, and then input start and end
Hours of Provider Operation	times if required.

### **Objectives:**

Parameter	Definition
Expected Messages Per Day	Number of messages.
Maximum Messages Per Day	
Daily Peak Period	Select an option from the list, and then input start and end times if required.
Peak [Msg/Min]	Expected messaging capacity.

### **Key Performance Indicators**:

Parameter	Definition
Throughput [Msg/Min]	The number of calls to the service per minute.
Response Time [sec]	The time for the service to respond.
Availability [%]	The availability of the service in its operating hours.
Performance [%]	A measure of the performance of the service.

4 Click **Save** to create the service level objective and the relationships to the service.

### To select a service level objective from the repository:

- In the Services view of a service, in the Service Level Objectives section, place the cursor over **Add SLO** to view the available options.
- 2 Click **From Catalog** to view a list of service level objectives in the repository.
- 3 Click **add** next to the service level objective you require to associate it with the business service.

# Making Services Available

When you consider a service to be ready you can make it available for consumption.

#### To make a service available to consumers:

In the Services view of a service, click **Edit**.

The Edit page for the service opens.

- 2 Select Consumable.
- 3 Click **Save** to make the service available for consumption.

## Using Applications

SOA Systinet enables you to organize your business services into a set of applications. You can use these applications as the primary service artifact for the purposes of contract and lifecycle management.

The following sections describe how to use applications:

- Creating an Application on page 103
- Adding a Service on page 103

The following functionality for applications is the same as for a business service:

Attaching documentation.

For details, see Adding Service Documentation on page 79.

Applying service level objectives.

For details, see Adding Service Level Objectives on page 99

• Making the application available to consumers.

For details, see Making Services Available on page 102.

### Creating an Application

SOA Systinet enables you to create artifacts to represent your applications.

### To create a new application:

- In the Services tab New menu, click **Application** to open the New Application page.
- 2 In the New Application page, input the following parameters:

Parameter	Definition
Name	A name for the application.
Description	A description of the application.
Version	The initial version number for the application.
Alias	An alias for the application.
Consumable	Select to make the application available to consumers.

3 Click **Save** to create the new application artifact.

### Adding a Service

An application represents a set of business services.

### To add a business service to an application:

In the Business Services section of the application view place the cursor over **Add Business Service** to view the following options:

#### New Business Service

Create a new business service as part of the application.

#### From Catalog

Select a business service already in the repository.

### 2 Do one of the following:

### To create a new business service:

- Click **New Business Service** to open the New Business Service page.
- 2 Input the business service parameters.

For details, see Creating Business Services on page 77.

3 Click **Save** to create the business service and the relationships to the application.

### To select a business service from the repository:

- Click **From Catalog** to view a list of business services in the repository.
- 2 Click **add** next to the business service you want to associate with the application.

# **Using Operations**

SOA Systinet enables you to use operations as the primary service artifact for contract and lifecycle management.

#### To create a new operation:

- In the Tools tab Catalog Browser, click **Operations** to open the Operations browse page.
- 2 Click **New** to open the New Operation page.

### 3 In the New Operation page input the following parameters:

Parameter	Definition
Name	The WSDL operation name (pt:plaintext). For example doGetCachedPage.
Description	A description of the application.
Categories	Select taxonomic categories for the operation.
Operation name	The WSDL operation name (optional, pt:plaintext). For example doGetCachedPage.
Port Type	$\label{thm:continuous} The WSDL \ port \ type \ (optional, pt:plaintext). \ For example \ {\tt RegistrySearchPort}.$
Target Namespace	The WSDL target namespace (optional, pt:plaintext). For example ure:RegistrySearch.
Input Types	The XSD input message types (multiple pt:plaintext). For example {http://www.w3.org/2001/XMLSchema}string.
Output Types	The XSD output message types (multiple pt:plaintext). For example {http://www.w3.org/2001/XMLSchema}base64binary.
Fault Types	The XSD fault message types (multiple pt:plaintext). For example {urn:RegistrySearch}failure.
Consumable	Select to make the operation available to consumers.

4 Click **Save** to create the new operation.

The Tools detail view for the operation opens. Switch to the service view to add implementations and service level objectives.

The following functionality for operations is the same as for a business service:

Adding implementations.

Operations can be added to implmentations.

For details, see Implementing Services on page 82.

Applying service level objectives.

For details, see Adding Service Level Objectives on page 99

• Making the operation available to consumers.

For details, see Making Services Available on page 102.

# 10 Service Discovery

SOA Systinet enables you to publish entire service infrastructures based on a number of different architectures.

These methods are described in the following sections:

• Publishing Services on page 107

Publish service infrastructures using definition documents that describe them.

• Importing Services from Registries on page 113

Import service infrastructure from a UDDI Registry.

BAC/UCMDB Service Discovery on page 117

Import service infrastructure from a BAC/UCMDB server.

# **Publishing Services**

SOA Systinet enables you to upload definition documents that describe service infrastructures. SOA Systinet processes the content of the document and enables you to create or modify artifacts to represent this infrastructure in SOA Systinet.

SOA Systinet can process the following definition document types:

- Web Service Definition Language documents (WSDL)
- Service Component Architecture documents (SCA 1.0)
- Business Process Execution Language documents (BPEL 1.1 and 2.0)
- XML Schema Definition documents (**XSD**)

- Extensible Stylesheet Language Transformation documents (**XSLT**)
- Document Type Definition documents (**DTD**)
- Any other file type is treated as documentation.
- Archives containing the above types of files.

### To publish service infrastructure definitions:

1 In the Tools tab menu New section, click **Upload Data Content**.

The Upload Data Content page opens.

- 2 Do one of the following:
  - To upload from a local file system:
    - 1 Select Local File.
    - 2 Use **Browse** or input a file path.
    - 3 Input the Server Folder to store the data content files in the repository.



Click **View Server Folders** to browse the repository workspace.

- To upload from a remote location:
  - 1 Select Remote File.
  - 2 Input the URL for the remote file location.
  - 3 Input the Server Folder to store the data content files in the repository.



Click **View Server Folders** to browse the repository workspace.

### 3 Optionally, expand **Show Advanced Options** and select from the following options:

Parameter	Definition			
Base URL (Remote File only)	The final publishing location for remote resources is determined by the Input URL, the Server Folder and the Base URL, as follows. If you publish a file from http://server/some/path/somefile.wsdl, select a server folder /mywsdls, and set the Base URL to http://server/some, the final publishing location is /mywsdls/path/somefile.wsdl.			
Synchronization (Remote File only)	Select a Synchronization policy for change management. For more details, see Synchronization Policy on page 278.			
Decomposition	<ul> <li>Select a WSDL processing level from the following options:</li> <li>Services Process any WSDLs, create all defined content and create business services to associate with any newly created implementations. </li> <li>Implementations Process any WSDLs and create all defined content. Business services are not created. </li> <li>None Publish any WSDLs as artifacts with attached data content. The WSDL files are not processed. </li> </ul>			

Parameter	Definition		
Archive Content Processing	Select to extract an archive and process the content. If not selected, the archive is published as a Documentation artifact with attached data content.		
	By default, this functionality supports ZIP, JAR, EAR, WAR, and BPR. Other archive types are not processed by the publisher and are published as documentation artifacts with attached data content  The archive types of archive that the publisher processes is configurable. For details, see "Configuring Archive Publishing" in the HP SOA Systinet Administrator Guide.		
Remove Unsynchronized	If a WSDL is republished the artifacts it references may change and previously created artifacts may no longer be required. Select artifact ty to remove the relationships with these obsolete referenced artifacts.		

#### 4 Click Next.

The publisher analyzes the content of the selected files and services and the Publishing Overview page opens. This page displays a list of the content of the file and a decomposition of any WSDLs. The page displays the artifacts to create or modify and a publishing status compared to existing artifacts.



This process may take some time.

The content is listed with the following possible statuses:

#### New

A new artifact will be created.

#### Changed

The artifact already exists and will be updated.

#### Duplicate

A similar artifact exists, usually in a different publishing location.

#### Error

The publisher encountered an problem processing this content.

#### Identical

An identical artifact exists, usually in the same publishing location.

#### Kept

An existing artifact referenced by a previous version of the defining document that retains any existing relationships.

#### Unsynchronized

An existing artifact referenced by a previous version of the defining document that loses any existing relationships.

#### Warning

Additional warnings reported.



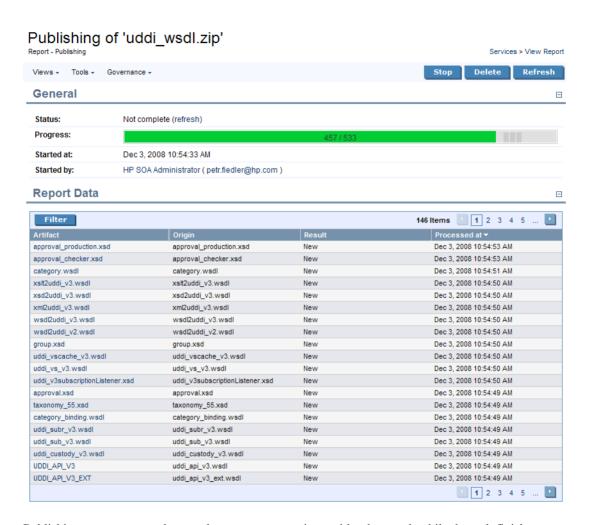
It is possible for particular content to have multiple statuses.

If there are any publishing problems, a warning box displays and you can click **Details** to view the specific problems for particular content.

5 Select the file content to publish and then click **Finish**.

Publishing may involve large numbers of artifacts. SOA Systinet executes publishing as an asynchronous task.

When publishing starts, the Publishing page opens with an information bar showing the progress of the task.



Publishing executes asynchronously so you can continue with other work while the task finishes.

You can monitor tasks in progress in the Dashboard My Task Results portlet. For details, see My Task Results Portlet on page 39.

6 The Publishing Report displays the current status of the task, with an option to Stop the task if required.

The Report Data section displays the results for each published artifact.

Click **Refresh** to update the Report Data section while publishing is in progress..

- After publishing is complete, there is an option to **Undo Changes**. Click **Undo Changes** to undo changes to published artifacts. This also executes as an asynchronous task.
  - Undo only applies to the revision of the artifact created by publishing. Any subsequent modifications of an artifact change its revision and the Undo option will not rollback these artifacts.
- SOA Systinet also uses the definition document processing functionality of the publisher if you publish a document using the following functionality:
  - Adding documents to SOA Systinet with an associated external resource.

For details, see Adding Documentation on page 256 and Managing Definition Data on page 259.

• Adding a SOAP Service implementation to a business service.

For details, see Adding SOAP Services on page 83.

Adding a WSDL to a SOAP Service implementation.

For details, see Adding WSDLs on page 91.

Adding an XSD definition to an XML service.

For details, see Adding an XML Service Definition on page 97.

# Importing Services from Registries

SOA Systinet enables you to import services and associated entities from a UDDI Registry.

Before any data transfer takes place between SOA Systinet and a UDDI registry, a registry artifact must be created, registry certificates must be imported to SOA Systinet, and the taxonomies must be synchronized.

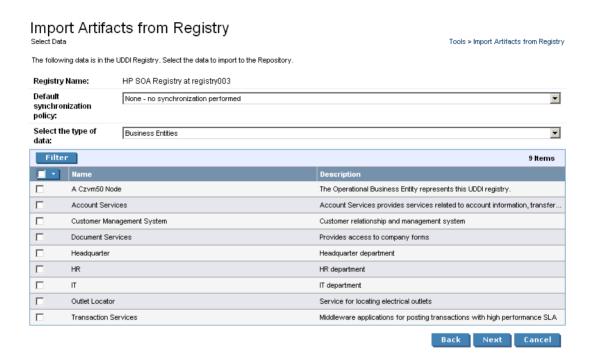
For details, see "Registry Setup and Configuration" in the HP SOA Systinet Administrator Guide.

### To import data from a UDDI registry:

- In the Tools tab menu, under Registry Content, click **Import Registry Content** to open the Import Artifacts from Registry page.
- In the Import Artifacts from Registry, select a registry from the drop-down list or click **New**, to create a new registry artifact.

For details about creating a registry artifact, see "Creating a Registry Artifact" in the *HP SOA Systinet Administrator Guide*.

Click **Next** to set the import details:



3 Input the following parameters:

Parameter	Definition
Registry Name	The target registry to import data from
Default synchronization policy	Select a policy from the drop-down list. For more details see Synchronization Policy.
Select the type of data	Select entity type to populate the table

- 4 Use **Find** to filter that data set.
- 5 Select data from the registry to import and then click **Next**.
- 6 In the summary page, verify the data to be imported, and then click **Finish**.



If you are importing a business entity, all its business services are imported as well, and if you are importing a business service, all its binding templates are also be imported. If a single business entity is imported then input a service name and description for the new business service artifact to associate with the imported items.

Any imported endpoints, are categorized with the same environment category that categorizes the registry server artifact.

When the import process begins, an import report is created. This process takes some time so click **Refresh** every so often - you may have do this several times until the report is complete (and **Refresh** disappears).

When the import is complete, click one of the **Registry Import Reports** in the **Sub report** section to view the import report details for that entity.

The most important part of the report is the **Report Data** section:

Report Data				
Registry:	: HP SOA Registry at registry003			
State	Туре	Artifact Name	Uddi Registry Key	Status
IMPORTED	Business Service	AccountService	uddi:f604cff0-340d-11d9-abbf-f0870520abbf	NEW
IMPORTED	Binding Template	http://example.com/accountsvc/account	uddi:f62bdff0-340d-11d9-abbf-f0870520abbf	NEVV

This report shows exactly what was imported, and the import status of all the imported items.

Parameter	Definition	
state	State	Description
	IMPORTED	The item was successfully imported.
	EXPORTED	The item was successfully exported.
	DELETED	The item (Business Service or Binding Template) was deleted from the UDDI registry during export because the corresponding artifact had been deleted in SOA Systinet.
	FAILED	An error occurred during the export/import of the item.

Parameter	Definition	
type	The UDDI entity type: Business Entity, Business Service or Binding Template	
artifact name	The SOA Systinet artifact name	
uddi registry key	The unique id of the corresponding UDDI entity	
status	The synchronization status before the import/export was performed	

# **BAC/UCMDB** Service Discovery

SOA Systinet enables you to import services from the Universal Configuration Management Database (UCMDB) used by *HP Business Availability Center* (BAC).



BAC/UCMDB server must be integrated with SOA Systinet.

For details, see "Setting Up BAC/UCMDB Integration" in the *HP SOA Systinet Administrator Guide*.

### To import services from BAC/UCMDB:

In the Services tab menu Service Discovery section, click **BAC/UCMDB**.

The BAC/UCMDB Service Discovery page opens.

2 Click Start Discovery.

A task progress information bar opens with a link to the discovery process report.

### BAC / UCMDB Service Discovery

Discovered Services Services > BAC / UCMDB Service Discovery Select services you want to govern, reassign or categorize (discovered services cannot be accessed by users unless you "Apply Governance").

Information: (Step 2 of 3) Storing discovered artifacts... Click here for detailed report.

The task consists of the following stages:

Read the data from the BAC/UCMDB server.

- 2 Store the discovered data in the SOA Systinet repository.
- 3 Update relationships between artifacts in the repository.

Discovery executes asynchronously so you can continue with other work while the task finishes. SOA Systinet notifies you by e-mail when the task is complete.

You can monitor tasks in progress in the Dashboard My Task Results portlet. For details, see "My Task Results Portlet".

You can view the progress and results of the discovery task by clicking **Click here for detailed report** in the information section of the BAC/UCMDB Service Discovery page. The report shows a table of discovered and stored artifacts and if the task is still executing, the task progress bar is displayed with an additional option to stop the task.

#### To stop a running BAC/UCMDB discovery task:

- In the BAC/UCMDB Service Discovery page, in the task progress information bar, select **Click here for detailed report.** The Report BAC Discovery Tool page opens.
- 2 Click Stop.

The task does not stop immediately. The import of data stops, but SOA Systinet ensures that the data imported is consistent by updating the relationships between stored artifacts.

If you execute discovery again, the data not imported the first time is re-discovered and then imported.

You can schedule BAC/UCMDB Discovery to execute at a set time or on periodic basis. Click **Schedule Task** and set the execution details. For details, see Setting a Schedule on page 285.

If a task already exists, **Set Schedule** is replaced with and information bar displaying the next scheduled discovery execution time.

Figure 32. BAC/UCMDB Service Discovery



After a discovery task, the BAC/UCMDB Service Discovery page is populated with a list of services from the BAC/UCMDB server that are not already in governance in SOA Systinet, or have not been marked as rogue or infrastructure.



Any discovered endpoints are categorized with the same environment category applied to the BAC/UCMDB server artifact.

You can process services imported from BAC/UCMDB.

For details, see the following sections:

Governing Discovered Services on page 120

Put services into a governance lifecycle process.

Marking Discovered Services as Rogue on page 122

Mark discovered services as unnecessary and ignore them in subsequent discoveries.

Marking Discovered Services as Infrastructure on page 122

Mark discovered services as background services and ignore them in subsequent discoveries.

These functions are not available if there is a discovery task in progress.

After discovery, services are monitored for changes and can be synchronized.

For details, see Synchronizing Discovered Services on page 123.

In addition, you can use bulk operations on these services using the functionality in the **Actions** menu.

These actions are the same as those in Services list views.

### Governing Discovered Services

You can start lifecycle management for the services imported from BAC/UCMDB.

The govern discovered service process checks the repository for matching artifacts and resolves potential conflicts. The default rules for a conflict are determined by a configuration file. The default behaviour is to check for artifacts with matching name properties. For SOAP Services, SOA Systinet checks for matching serviceName and serviceNamespace properties before checking the name.

A matching Business Service, SOAP Service, or Organizational Unit in the repository is assumed to be the same entity discovered in BAC/UCMDB. The artifact properties in the repository version are overwritten by the properties of the discovered entity. These properties are defined by a mapping file.

Any existing relationships with the existing repository artifact are preserved with the exception of previously discovered entities. For example, a Business Service created in SOA Systinet is implemented with a SOAP Service previously discovered in BAC/UCMDB. The same business service in BAC/UCMDB has the SOAP service removed and is then discovered. SOA Systinet removes the relationship to that SOAP Service.

In the event that there are two or more artifacts in SOA Systinet that conflict with a discovered entity, you must resolve the conflict manually as described in To govern discovered services:.

### To govern discovered services:

In the Services tab menu Service Discovery section, click **BAC/UCMDB**.

The BAC/UCMDB Service Discovery page opens.

2 Select the services to enter into governance, and click **Apply Governance**.

The Govern Discovered Services page opens.

- 3 If the default governance process is not the correct process, use **Change** to select one.
- 4 Select the lifecycle stage at which to enter the governance process, and select **Stage Completed** if all the requirements of the lifecycle stage are complete.
- 5 Do one of the following:
  - If there are no unresolved conflicts, click **Save** to enter the service into the selected governance process.

The BAC/UCMDB Service Discovery page re-opens and the newly governed service is removed from the list of discovered services.

• If there are conflicts that require manual resolution, click **Next**.

The Resolve Ambiguities page opens.

- 6 Do any of the following:
  - To leave the discovered entities ungoverned, select the entities and click **Skip**.
  - To create a new artifacts without merging with existing ones, select the entities and click Mark as New.
  - To merge a discovered entity with an existing artifact, click **Map to** for the entity, select the artifact to merge and click OK.

Each action changes the **Resolve as** status.

- 7 Do one of the following:
  - If there are conflicts for another artifact type, click **Next** and return to Step 6 for that artifact type.
  - When all the conflicts are resolved, click **Finish** to perform your selected actions.

### Marking Discovered Services as Rogue

Some of the discovered services may not be useful or necessary. Marking them as rogue makes them invisible in the SOA Systinet UI and ignores them in subsequent discovery processes.

### To mark a discovered service as rogue:

- In the Services tab menu Service Discovery section, click **BAC/UCMDB**.
  - The BAC/UCMDB Service Discovery page opens.
- 2 Select the services to mark as rogue, and click **Mark as Rogue**.
  - The Govern Discovered Services page opens.
- 3 Review the list of services, and then click Mark as Rogue.

The BAC/UCMDB Service Discovery page re-opens and the rogue service is removed from the list of discovered services.

### Marking Discovered Services as Infrastructure

Some discovered services may be internal parts of third party products. Marking them as infrastructure makes them invisible in the SOA Systinet UI and ignores them in subsequent discovery processes.

#### To mark a discovered service as infrastructure:

- In the Services tab menu Service Discovery section, click **BAC/UCMDB**.
  - The BAC/UCMDB Service Discovery page opens.
- 2 Select the services to mark as infrastructure, and click **Mark as Infrastructure**.

The Govern Discovered Services page opens.

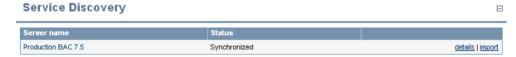
3 Review the list of services, and then click **Mark as Infrastructure**.

The BAC/UCMDB Service Discovery page re-opens and the infrastructure service is removed from the list of discovered services.

### Synchronizing Discovered Services

Services discovered in BAC/UCMDB and entered into governance in SOA Systinet are monitored for changes.

The Service Discovery section of the Services view of a discovered services displays the source of the service, and it synchronization status:



Click **details** to view more information about the status and source of the discovered service.

Click **import** to update the SOA Systinet artifact with the latest changes from BAC/UCMDB.

# 11 Lifecycle Governance

SOA Systinet provides functionality that enables you to manage the lifecycle of artifacts by creating governance processes. Each artifact can then be associated with a different governance process.

SOA Systinet enables you to manage a hierarchy of artifacts, a governance tree. The primary artifact is the top level of a governance tree, related child artifacts are secondary artifacts in the governance tree. For example, a business service and its implementations.

The governance tree enables you to move these related artifacts through the same governance process together, while applying different task, policy, and approval conditions to primary and secondary artifacts.

In the Services tab, the **Lifecycle** section gives access to these features:

#### Lifecycle

Governance Dashboard Governance Processes Promotion Requests History

#### Governance Dashboard

Opens an overview page of governance records in which you have an interest.

#### Governance Processes

Opens an overview page of all governance processes.

#### Promotion Requests History

Opens an overview page of all resolved (historical) promotion requests.

The lifecycle process described in this chapter is based on the standard lifecycle taxonomy provided with SOA Systinet. You can modify the lifecycle taxonomy with using HP SOA Systinet Taxonomy Editor.

For details, see the HP SOA Systinet Taxonomy Editor Guide.

The lifecycle management procedures are described in the following sections:

- Defining Governance Processes on page 126
- Managing Governance Processes on page 139
- Governing Artifacts on page 140
- Lifecycle Reports on page 148

# **Defining Governance Processes**

Governance is a combination of processes, practices and tools which facilitate the lifecycle of artifacts. SOA Systinet lifecycle governance enables the successful management of processes, their associated stages, and the creation and management of approval processes, tasks, and policies.

Only the Administrator can create a governance process.

The creation of a governance process is described in the following sections:

Creating a Governance Process on page 127

Explains how to create an initial governance process.

• Defining Lifecycle Stages on page 130

Explains how to define lifecycle stages of primary and secondary artifacts.

Copying Lifecycle Stages on page 137

Shows how to copy previously defined lifecycle stages.

• Removing Lifecycle Stages and Definitions on page 138

Shows how to delete previously defined lifecycle stages.

• Cloning a Governance Process on page 138

Describes how to clone an existing governance process.

### Creating a Governance Process

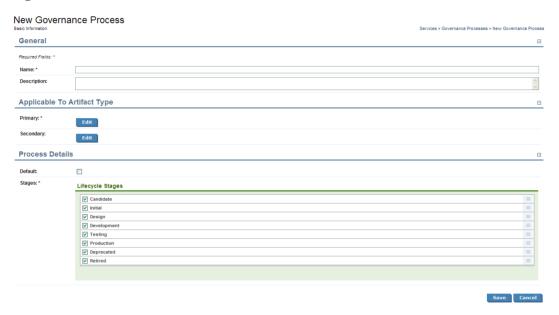
The first stage in artifact lifecycle management is the creation of a governance process.

### To create a new governance process:

In the Lifecycle menu of the Services tab, click **Governance Processes** to open the Governance Processes page, and then click **New**.

The New Governance Process page opens, as shown in Figure 33.

Figure 33. New Governance Process



- 2 In the **General** pane, enter a **Name** and **Description** for the governance process.
- In the **Applicable to Artifact Type** pane, select the **Primary** (required) and **Secondary** (optional) artifacts to be governed.

To select artifact types, do the following:

- Click **Edit** to open a list of available artifact types.
- Browse or use the Quick Find box to select the artifacts you need and click OK.
- 4 In the **Process Details** pane, define the lifecycle stages for the governance process, as follows:
  - If you want this process to be used automatically when defining further governance processes, select the **Default** check-box.

• The Starting Stage is automatically set to Candidate and all lifecycle stages are selected.

De-select the check-box of the lifecycle stages you do not need.

To reorder lifecycle stages, drag and drop stages to the order you require.

### 5 Click Save.

The new governance process opens in the View Governance Process page, as shown in Figure 34.

Figure 34. View Governance Process

Test Sovernance Process (Dra	ft)					Services > Governance Pro	cesses > View Governance Proce
						Publish C	lone Edit Delete
Applicable To							
Primary:	Business Service						
Secondary:	Endpoint, Implementation						
Process Detai	ils						
Default:	No						
Starting Stage:	Candidate						
Stages:	Candidate, Initial, Design, Development, Testing, Production, Deprecated, Retired						
Published:	No						
Stage Definiti	ons						
Artifact Type / Stage		Promotion Approval	Rollback Approval	Tasks	Policies	Actions	
Business Serv	ice	0/8	0/8	0/8	0/8	0/8	View All Stages
Candidate		No	No	0	0	0	Edit
Initial		No	No	0	0	0	Edit
Design		No	No	0	0	0	Edit
Developmen	t	No	No	0	0	0	Edit
Testing		No	No	0	0	0	Edit
Production		No	No	0	0	0	Edit
Deprecated		No	No	0	0	0	Edit
Retired		No	No	0	0	0	Edit
Actions: Remov	ve Add Stage Definition ▼						

This is a new governance process, so the default Published status is **No**.

## Defining Lifecycle Stages

Lifecycle stages represent important milestones in the governance process. Lifecycle stages and their order are defined in the governance process definition.

Each lifecycle stage consists of a set of conditions described in the following procedure:

#### To define lifecycle stages:

In the Lifecycle menu of the Services tab, click **Governance Processes** to open the Governance Processes page, and then click the name of the required process.

The Governance Process page opens.

- 2 Do one of the following:
  - To set a stage definition for primary artifacts:
    - In the Stage Definitions pane, expand the primary artifact node to open the list of defined stages and click **Edit** next to the stage you want to modify.

The Edit Stage Definition page opens.

### To set a stage definition for secondary artifacts:

- In the Stage Definitions pane, navigate to and click **Add Stage Definition** to open the drop-down list, and then select the name of the secondary artifact you want to define a stage for.
  - The New Stage Definition page opens.
- In the Stage field, open the drop down list of available stages and select the one you want to define.
- 3 In the Stage Definition Page, do any of the following:
  - Define the next stage in the lifecycle (primary artifact types only).

For details, see Defining the Next Lifecycle Stage on page 131

• Set approvers for promotion and rollback.

For details, see Defining Promotion and Rollback Approvers on page 132.

• Define tasks to complete before promotion.

For details, see Setting Stage Definition Tasks on page 133.

• Set policies to comply with before promotion.

For details, see Setting Stage Definition Policies on page 134.

• Define automatic actions to execute when a lifecycle transition occurs.

For details, see Defining Automatic Actions on page 134.

Click **Save** to save the Stage Definition and return to the Governance Process page.

- A valid stage definition must contain at least one of the above conditions.
- To view definitions of all stages of a specific artifact type, click the artifact name in the Stage Definitions pane to open the Stage Definitions page.

All stage details are listed. You can edit or copy a stage definition using **Edit** or **Copy**.

### Defining the Next Lifecycle Stage

By default, the order of lifecycle stages in a governance process is determined by the order of stages set during process creation. For each individual stage, you can determine the next lifecycle stage for primary artifact types.

### To define the next lifecycle stage:

In the Next Stage field, click **Edit** to open the Select a Stage section.

2 Select the next lifecycle stage, and then click **OK**.

The Next Stage field updates with the new details.



You can select multiple next stages. In this case, the stage to promote to is determined when a Request for Promotion is made. For details, see Submitting a Promotion Request on page 143.

#### Defining Promotion and Rollback Approvers

For each lifecycle stage in a governance process you can define a unique set of approvers. The approvers determine whether the artifacts governed by the process are ready to move to the next lifecycle stage or to rollback to the last stage.

### To define approvers for promotion or rollback:

Next to **Promotion** or **Rollback**, click **Set Approvers** to open the Set Approvers page.

In the Set Approvers page, do any of the following:

- To add an individual voter:
  - 1 Select the Users tab.
  - In the **Search for** field, enter the user name to locate (use an asterisk (\*) as a wildcard), and then select whether you want to search by **Full Name** or **Login Name** from the drop down menu.
  - 3 Click **Go** to show matching search results.
  - 4 Click **Select** next to the user name to add as an approver.
    - The selected voter is added to the Approvers list.
  - 5 Select the **Required** check-box for an approver to make their voter mandatory.
- To remove individual voters, select the check-box next to their name, and then click Remove.

The selected voters are removed from the Approvers list.

- To add a group voter:
  - 1 Select the **Groups** tab.
  - 2 In the **Search for** field, enter the group name to locate (use an asterisk (\*) as a wildcard).
  - 3 Click **Go** to show matching search results.
  - 4 Click **Select** next to the group to add as an approver.

The selected group is added to the Approvers list.

- 5 In **Required Votes**, enter the number of votes required from group members.
- To remove groups, select the check-box next to the group name, and then click Remove.

The selected groups are removed from the Approvers list.

- To set a minimum number of votes, expand Show Advanced Options and set a required number
  of votes in Minimum Total Votes.
- 2 Click **OK** to save the approvers and return to the Stage Definition page.

The Promotion or Rollback field displays the new details.

#### Setting Stage Definition Tasks

You can define a set of manual tasks to perform as part of a lifecycle stage.

#### To add a task:

- In the **Tasks** field, click **Add** to open the **Add Task** section.
- 2 Enter a name and description for the task.
- 3 Select **Completion Tracking** if the task must be complete prior to stage promotion.
- 4 Click Add.

The new task is added to the Tasks field.

To edit an associated task, click **Edit** in the task row, edit the parameters as required, and then, click **OK**.

To remove tasks, select the check-box next to the task name, and click **Remove**.

#### Setting Stage Definition Policies

You can define a set of policies to validate artifact compliance as part of a lifecycle stage.

#### To add a policy:

- Click **Add** to open the **Add Policy** section.
- In the **Search for** field enter the policy text to locate (use an asterisk (\*) as a wildcard), and select whether to search by name or description.
- 3 Click **Go** to show matching search results.
- 4 To add policies, select the check-box next to the policy name, and then click **Add**.
  - The selected policies are added to the Policies field.
- 5 Select **Required** for policies that must pass validation prior to stage promotion.

To remove associated policies, select the check-box next to the policy name, and click **Remove**.

#### **Defining Automatic Actions**

When an artifact changes lifecycle status you may want to change some of its properties.

Automatic Actions enable you to define a number of property changes to trigger automatically when a specified lifecycle change occurs.

The types of action available and the lifecycle events that trigger them are described in Table 1 and Table 2.

**Table 1. Automatic Action Types** 

Action	Description
Change Access Rights	Modify read and write access for artifacts governed by the process.
Notify	Send notification e-mails to users about lifecycle status changes.
Disable Consumption	Prevent the creation of new contracts.
Enable Consumption	Allow the creation of new contracts.
Change Owner	Modify the user responsible for the artifacts governed by the process.



Only events applicable to artifacts governed by the lifecycle process are available.

**Table 2. Automatic Action Triggers** 

Trigger	Description
Entering Stage	Execute actions when artifacts begin a new lifecycle stage.
Promotion Started	Execute actions when a promotion request is made.
Promotion Cancelled	Execute actions when a promotion request is cancelled.
Promotion Failed	Execute actions when promotion fails because of failed compliance or rejection by approvers.
Promotion Succeeded	Execute actions when promotion is approved and the artifact is unlocked for editing.
Rollback Started	Execute actions when a rollback request is made.
Rollback Cancelled	Execute actions when a rollback request is cancelled.
Rollback Failed	Execute actions when rollback fails.
Rollback Succeeded	Execute actions when rollback is approved and the artifact is unlocked for editing.
Leaving Stage	Execute actions when artifacts leave the current stage.

Not all triggers are available for each action. Only triggers relevant for a particular event are available, or in some cases automatically selected.

#### To add an automatic action:

• In the Actions section, expand **Add Action** and select one of the following actions:

#### Change Access Rights

The Change Access Rights page opens.

For details, see "Access Rights" in the HP SOA Systinet Administrator Guide.

#### Notify

The Notification Message page opens.

For details, see Notifications on page 253.

#### Disable Consumption

The Disable Consumption action is added to the lifecycle stage.

When promotion is approved and before the artifact is unlocked for editing, the automatic action changes the Consumable property to False, disabling the creation of new contracts.

For details, see Chapter 12, Managing Contracts.



Any existing contracts remain valid.

#### Enable Consumption

The Enable Consumption action is added to the lifecycle stage.

When promotion is approved and before the artifact is unlocked for editing, the automatic action changes the Consumable property to True, enabling the creation of new contracts.

For details, see Chapter 12, Managing Contracts.



Consumers of previous major versions of the artifact are automatically notified about the availability of the new version.

### Change Owner

The Change Owner page opens.

For details, see Changing Artifact Ownership on page 249.

To edit an action, click **Edit** in the action row to open the Edit page and see the relevant section for adding that type of action.

To remove actions, select the check-box next to the action name, and click **Remove**.

### Copying Lifecycle Stages

SOA Systinet enables you to define lifecycle stages by copying details from one lifecycle stage to another.

### To copy a lifecycle stage definition:

In the Stage Definitions pane, expand the required artifact type to view available stages, and then click **Copy** next to the stage that you want.

The **Copy Stage** page opens.

- 2 In the Destination pane, do the following:
  - In the Stage field, click **Edit** to open a list of available stages, select the destination stages you need, and then click **OK**.
  - In the Artifact Type field, click **Edit** to open a list of available artifacts, select the destination artifacts, and then click **OK**.

In the What To Copy pane, select whether to copy the associated approvals, rollbacks, tasks, policies, or automatic actions from the source stage, and then click **Save**.

The destination stages are updated in the Stage Definition pane.

### Removing Lifecycle Stages and Definitions

Lifecycle stages consist of two elements, the stage itself as a step in the lifecycle process and the stage definition which describes the associated tasks, policies, and actions.

#### To remove a stage definition:

- In the View Governance Process page, in the Stage Definitions pane, expand the artifact types to view their stage definitions.
- 2 Select the check-boxes for the stages to remove and click **Remove**.

Primary stage definitions are reset to empty lifecycle stages with no associated tasks, policies, or actions. The stage itself remains as a step in the governance process.

Secondary artifact stage definitions are removed from the process.

### To delete a lifecycle stage:

- In the View Governance Process page, click **Edit** to open the Edit Governance page.
- 2 In the Process Details section, de-select any stages that the process does not require, and click **Save**.

The governance process is reset with the next stage for each lifecycle stage set to match the order of the remaining lifecycle stages.

### Cloning a Governance Process

Creating governance processes can take some time. SOA Systinet includes a feature which enables you to create a new governance process with parameters based on an existing governance process, enabling one process to be used as a template in the creation of others.

#### To clone a governance process:

- In the Lifecycle menu of the Services tab, select **Governance Processes** to open the Governance Processes page.
- 2 Click the required process to open the **Governance Process** page, and click **Clone**.
- To edit the cloned governance process, click **Edit** and follow the procedure from Step 2 of Creating a Governance Process on page 127.

# Managing Governance Processes

Before a governance process can be successfully used, you must publish it.

The publication and management of a governance process is described in the following sections:

- Publishing a Governance Process on page 139
- Deprecating a Governance Process on page 140
- Deleting a Governance Process on page 140

### Publishing a Governance Process

After creating a governance process, the next step is to make it available for the governance of artifacts.

### To publish a governance process:

- From the Lifecycle menu of the Services tab, click **Governance Processes** to open the Governance Process page, and then do one of the following:
  - Select the check-box next to the name of the governance process you need and click **Publish**.
  - Click the name of the governance process you need to open the Governance Process page, and click Publish.

This governance process is now available to be used in the governance of primary and secondary artifacts.

### Deprecating a Governance Process

If you need to make a governance process **unavailable** for the governance of artifacts, you can deprecate it

#### To deprecate a governance process:

- From the Lifecycle menu of the Services tab, click **Governance Processes** to open the Governance Process page, and then do one of the following:
  - Select the check-box next to the name of the governance process you need and click Deprecate.
  - Click the name of the governance process you need to open the Governance Process page, and click **Deprecate**.

The governance process is deprecated and its status is changed to **Deprecated** and is not available for the governance of artifacts until it is published.

### Deleting a Governance Process

If a governance process is no longer being used in the governance of artifacts, you can delete it.

### To delete a governance process:

- From the Lifecycle menu of the Services tab, click **Governance Processes** to open the Governance Process page, and then do one of the following:
  - Select the check-box next to the name of the governance process you need and click Delete.
  - Click the name of the governance process you need to open the Governance Process page, and click **Delete**.

The governance process is deleted and is no longer available to be used in the governance of artifacts.

# Governing Artifacts

During the process of artifact governance, each lifecycle stage represents an important milestone. Depending on the configuration of the lifecycle stage, requests for promotion to the next lifecycle stage require approval.

The Administrator has the ability to change governance processes, lifecycle stages, and to force promotion without approval. A user with write permission is able to switch artifacts to another governance process if the new governance process governs the same artifact structure.

You can do this from the Manage Governance page of the artifact Stage Details.

The governance of artifacts in a lifecycle is described in the following sections:

- Starting Artifact Governance on page 141
- Managing Associated Policies and Tasks on page 142
- Submitting a Promotion Request on page 143
- Submitting a Rollback Request on page 144
- Handling Promotion and Rollback Requests on page 145
- Ending Artifact Governance on page 147
- Promotion History on page 147

### Starting Artifact Governance

This function enables the governance of an artifact that is not currently governed, and where the artifact will act as the primary artifact in an existing governance process.

### To start governing an artifact:

- From the browse page of any ungoverned artifact, open the Governance menu and select **Start Governance**.
  - The Start Governance page opens.
- 2 In the Process field, select the process you want to use and click **OK**.

### Managing Associated Policies and Tasks

To ensure promotion of stages, it is important that you successfully manage policies and tasks associated with an artifact under governance.

### To manage policies associated with a governed artifact:

From the browse page of any governed artifact, navigate to the Governance pane and click **Status**.

The Stage Details page opens, as shown in Figure 35.

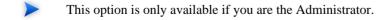
Figure 35. Stage Details



- 2 In the Policies pane, do one of the following:
  - Click **Run Validation** next to the policy you need to validate.

If the result of validation is available, it is shown in the Last Result column of the Policies pane.

• Click **Remove** next to a policy name to delete it.



#### To manage tasks associated with a governed artifact:

- From the browse page of any governed artifact, navigate to the Governance pane and click **Status**.

  The Stage Details page opens.
- In the Tasks pane, depending whether the Completion column shows the task as incomplete or complete, you can click **Mark as Complete** or **Mark as Incomplete** to change the status.
  - This functionality is also available from the **To Do** sidebar. For details, see Sidebar on page 66.

To manage policies and tasks for related artifacts, click the artifact name in the Navigation pane and follow the procedures To manage policies associated with a governed artifact: and To manage tasks associated with a governed artifact:.

### Submitting a Promotion Request

When an artifact with an associated approval process definition requires amendment you must request approval.

Promotion can only be requested on a **primary** artifact and only when all mandatory tasks are complete on all related artifacts.

### To submit a promotion request:

- From the browse page of any governed primary artifact, navigate to the Governance pane and click **Status**.
  - The Stage Details page opens.
- 2 Click **Start Promotion** to open the Start Promotion page, as shown in Figure 36.

Figure 36. Start Promotion



To promote the governance tree to the next stage in the governance process automatically after an approved promotion request, select the **Advance Stage on Promotion** check-box, and in **Target Stage**, select the next stage from the drop down list.

If you do not select the check-box, you must make this change manually from the Stage Details page by expanding **Tools**—**Change Stage to** 'stage name'.



This can only be done after stage approval.

4 Click **OK** to create the approval request for the users and groups listed in the Approvers section for the current lifecycle stage.

The approvers are notified of the request by e-mail.

While awaiting promotion approval, the artifact is locked and cannot be edited or deleted. Artifacts are unlocked when promotion succeeds or fails.

To check the approval status of a promotion request, open the Stage Details page of the artifact, and then do the following:

Expand Views and select Approvers to open the Approvers pane.

### Submitting a Rollback Request

SOA Systinet enables you to rollback the last approved lifecycle stage.

Rollback can only be requested on a **primary** artifact.

#### To submit a rollback request:

From the browse page of any governed primary artifact, navigate to the Governance pane and click **Details**.

The Stage Details page opens.

Rollback requests are sent automatically to the designated rollback approvers for the previous approved lifecycle stage.

While awaiting rollback approval, the artifact is locked and cannot be edited or deleted.

To check the approval status of a rollback request, open the Stage Details page of the artifact, and click **View Rollback Request**.

## Handling Promotion and Rollback Requests

A request requiring your approval appears in the Requests to Approve page.

## To approve or reject a request:

- In the Lifecycle menu of the Services tab, click **Requests to Approve** to open the Requests to Approve page.
- 2 Click the name of the request to open the Promotion or Rollback Approval page, as shown in Figure 37.

Figure 37. Promotion Approval

Systinet Best Practices  Services > Governance Dashboard > Re				mance Dashboard > Request		
				Approve Rejec		Cancel Request
Promotion Deta	ails					E
Artifact:	Systinet Best Practices (rev. 2)					
Governance Process:	HP SOA Systinet-01					
Stage to Approve:	Candidate		Details			
Requested by:	admin					
Approvers						⊟
	Name	Vote(s)				
Users:	user1	Required - Pending				
	admin	Required - Pending				
Groups:	None					

3 Review the request and any responses made by other approvers, and then do any of the following:

#### Approve

To approve the promotion request. Enter comments if required, and click **Save**.

This option is only available if you are the Administrator or an Approver.

#### Reject

To reject the promotion request. Enter comments if required, and click **Save**.

This option is only available if you are the Administrator or an Approver.

#### Notify Approvers

To make comments on the promotion request without approving or rejecting the request.

This option is only available if you are the Administrator or a Maintainer.

The comments are sent to all approvers by e-mail.

#### Cancel Request

To cancel the promotion request.

This option is only available if you are the Administrator or a Maintainer.

An e-mail is sent to the requester when the required number of votes for that stage are received.

## **Ending Artifact Governance**

This function enables you to end the governance of an artifact.

If the artifact is the secondary artifact in the lifecycle, you can exclude the secondary artifact from the governance process.

#### To end artifact governance:

- From the browse page of any governed artifact, navigate to the Governance pane and click **Details** to open the Stage Details page.
- 2 Expand **Administration**→**End Governance** to open the End Governance page.
- 3 In the **Exclude from Governance** field, select the check-box to exclude the artifact from governance.
- 4 Click OK.

The artifact is no longer governed.

## **Promotion History**

The history of approvals and promotions is available from the browse page of any governed artifact and also from the stage details page.

## To open the promotion history of an artifact:

- Do one of the following:
  - In the detail view of an artifact, open the Governance menu, and select **Promotion History**.
  - Open the Stage Details view for an artifact, open the Views menu, and select **Promotion History**.

Click View Request for a particular stage to view the detailed tasks, policies, and approval information.

## Lifecycle Reports

SOA Systinet enables the production of lifecycle statistics reports.

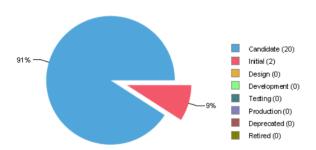
Two reporting tasks can be scheduled, one running a report hourly and the other running a report daily.

The resulting report is dependant on the details specified. However, an example report is shown below.



## Service Lifecycle Statistics

Lifecycle Stage	Number of SERVICES
Candidate	20
Initial	2
Design	0
Development	0
Testing	0
Production	0
Deprecated	0
Retired	0
Total:	22



The available report is always the last scheduled report completed successfully.

To save a copy of a report, you can export it to PDF format.

For details on creating and running reports, see Reporting Tools on page 275.

For details on scheduling tasks, see Tasks and Scheduling on page 284.

For details on searching for reports available to produce, see Reports on page 288.

# 12 Managing Contracts

SOA Systinet enables contracts to be set up between providers and consumers with associated service level objectives (SLO).



Contract Manager is an additional component of SOA Systinet. If your license does not include Contract Manager these features are not available.

By default the following artifact types are defined as providers and consumers:

Provider Artifact Types	Consumer Artifact Types	
Application	Application	
Business Service	Business Service	
Implementation	Implementation	
SOAP Service	SOAP Service	
XML Service	XML Service	
Web Application	Web Application	
Endpoint	• Contact	
Operation	User Profile	
	Organizational Unit	

The set of provider and consumer artifacts is configurable.

For details, see "Configuring Consumer and Provider Artifacts" in the *HP SOA Systinet Administrator Guide*.

Contract management is enabled by the following set of procedures:

- Requesting Consumption on page 152
- Processing Consumption Requests on page 154
- Importing Existing Contracts on page 154
- Revoking an Active Contract on page 155

At each stage in the request process SOA Systinet sends mail notifications to the following users:

- Users with write permission for the provider artifact.
- Users with write permission for the consumer artifact.
- Any additional e-mails listed in the provider artifact stakeHolderEmails property.
- The administrator is not notified unless they are specifically granted write permission from another source.

## Requesting Consumption

To consume a provider artifact you must make a request to the provider.

You can make a request if you have write permission for the consumer artifact (the owner, a member of the owning group, a user with ACL write permission, or the administrator).

## To request consumption of a provider artifact:

- 1 Do one of the following:
  - In the Services tab menu New section, click Consumption Request.

• In the service or detail view of a provider artifact that is available for consumption, open the **Consumption** context menu and select **New Request**.

Skip to Step 4

The New Consumption Request page opens.

- 2 Select the provider artifact type from the list and then click **Next**.
  - If there are no available provider artifacts for the selected type SOA Systinet warns you.
- 3 Use **Filter** to find the provider artifact.

Select the provider from the list and then click **Next**.

- 4 Select the consumer artifact type from the list and then click **Next**.
  - If there are no available consumer artifacts for the selected type SOA Systinet warns you.
- 5 Use **Filter** to find the consumer artifact.

Select the consumer from the list and then click **Next**.

- 6 If required, select **Select Specific SLO**, select an SLO from the list, and then click **Next**.
- 7 Optionally, modify the name and description of your consumption request and click **Next**.
- 8 Review the request details and click **Finish** to place your request.

You can view your consumption requests from the Services tab View menu with the **My Consumption Requests** link.

## **Processing Consumption Requests**

When consumers request a provider artifact you must either approve or reject their request.

You can approve or reject a request if you have write permission for the provider artifact (the owner, a member of the owning group, a user with ACL write permission, or the administrator).

#### To process consumption requests:

- In the Services menu View section, click **Requests to Approve** to open the list view of requests that require your attention.
- 2 Click the request name to open a view of that request.
- 3 To accept or reject a request, click **Accept** or **Reject** and confirm your decision.

If a request is accepted it becomes a contract between the consumer and provider artifacts.

A contract becomes invalid under the following conditions:

- The provider artifact is deleted.
- The consumer artifact is deleted.
- The associated SLO, if there is one, is deleted.

## Importing Existing Contracts

There may be existing contracts between providers and consumers that are not stored in the repository.

SOA Systingt enables you to import these contracts without requiring the request approval process.

You can import a contract if you have write permission for the provider artifact (the owner, a member of the owning group, a user with ACL write permission, or the administrator).

#### To import an existing contract:

In the Services menu Import section, click **Existing Contract**.

The Enter Existing Contract page opens.

- 2 Select the provider artifact type from the list and then click **Next**.
- 3 Use **Filter** to find the provider artifact.
  - Select the provider artifact from the list and then click **Next**.
- 4 Select the consumer artifact type from the list and then click **Next**.
- 5 Use **Filter** to find the consumer artifact.
  - Select the consumer artifact from the list and then click **Next**.
- 6 If required, select **Select Specific SLO**, select one from the list, and then click **Next**.
- 7 Optionally, modify the name and description of your contract, and then click **Next**.
- 8 Review the details and click **Finish** to create the contract.

## Revoking an Active Contract

You may need to cancel an active contract.

You can revoke a contract if you have write permission for the provider artifact (the owner, a member of the owning group, a user with ACL write permission, or the administrator).

#### To revoke a contract:

- In the Services menu View section, click **My Contracts** to display the list view of active contracts you provide.
- 2 Click the contract name to open a view of that contract.
- 3 Click **Revoke** to cancel the contract, and then confirm.

## Part IV. Policies

Policy Manager enables you to implement your company policy in SOA Systinet and verify the compliance of your service infrastructure. Access the main features of Policy Manager in the **Policies** tab.

Policy Manager is an additional component of SOA Systinet. If your license does not include Policy Manager these features are not available.

The following chapters describe Policy Manager features:

• Chapter 13, Policies UI

Navigate the Policies UI.

• Chapter 14, Managing Business Policies

Create and manage business policies.

• Chapter 15, Managing Technical Policies

Create and manage technical policies.

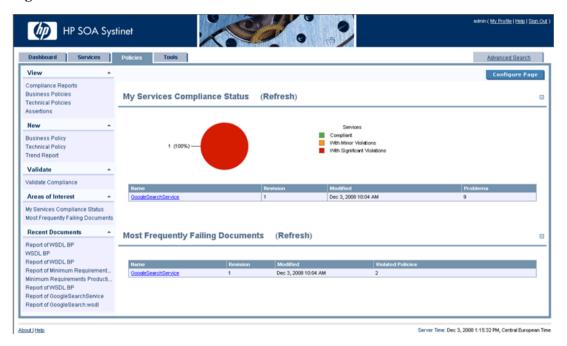
• Chapter 16, Validating Artifacts

Validate documents using your policies.

# 13 Policies UI

The **Policies** tab is the central location which shows all information about policies and compliance reports in one place to provide easy access and simple management.

Figure 38. Policies Tab



The Policies tab is split into the menu on the left and the main view pane, as described in these sections:

- Policies Menu on page 160
- Areas of Interest on page 163

• Policy Pages on page 165

## Policies Menu

The Policies tab menu is split into collapsible segments.

Each segment is described in the following sections:

Policies View Menu on page 160

Access list views of policy artifacts.

Policies New Menu on page 161

Create new policy artifacts.

• Validation Menu on page 162

Validate the policy compliance of an artifact.

• Areas of Interest Menu on page 162

Click an Area of Interest to return to the main Polices tab.

Recent Documents

Quick links to the last few artifacts viewed.

#### Policies View Menu

The View menu in the Policies tab provides links to list views for policy management.

Figure 39. Policies View Menu

View	
Compliance Reports	
Business Policies	
Technical Policies	
Assertions	

The View menu contains the following links:

Policy List Views

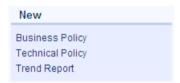
Links to list views for policy artifacts.

For details, see Policy and Report List Views on page 166.

#### Policies New Menu

The New menu in the Policies tab provides quick links to create new policy artifacts.

Figure 40. Policies View Menu



The New menu links to the following policy artifact creation pages:

#### Business Policy

Create a new business policy.

For details. see Creating Business Policies on page 185.

## Technical Policy

Create a a new technical policy.

For details, see Creating Technical Policies on page 193.

#### Trend Report

Create a new trend report.

For details, see Compliance Trends on page 206.

#### Validation Menu

The Validation menu in the Dashboard and Policies tab links to policy compliance functionality.

#### Figure 41. Validation Menu



The Validation menu contains the following functionality:

#### Validate Compliance

Start policy compliance validation for a resource.

For details, see Custom Validation on page 201.

### Areas of Interest Menu

Each Area of Interest selected for display in the Polices tab is shown in the Area of Interest menu.

Figure 42. Areas of Interest Menu

# Areas of Interest My Services Compliance Status Most Frequently Failing Document: Latest Pending Reviews

Click an Area of Interest to return to the main Polices tab and expand that Area of Interest if it is closed.

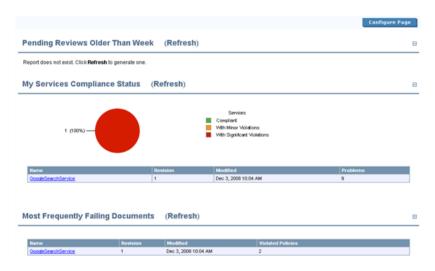
For details about Areas of Interest, see Areas of Interest on page 163.

## Areas of Interest

When you open the Policies tab, the page displays Areas of Interest in the main view.

Areas of Interest show various aspects of policy management in the form of reports.

Figure 43. Policies Tab Showing Areas of Interest



You can return to this view and display a specific Area of Interest at any time by clicking it in the Policies tab Areas of Interest menu.

The information shown in an Area of Interest is generated from the available validation data. You may need to execute these validations to generate the applicable data.

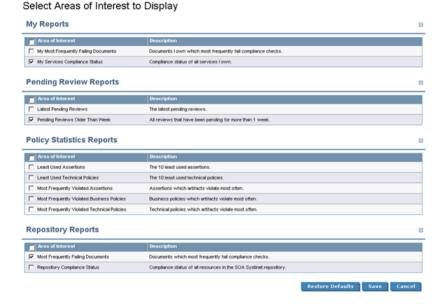
Areas of Interest do not update when you open them. To see an up-to-date Area of Interest, click **Refresh** after you open it. You may need to refresh the Area of Interest more than once to show the results of a recent action.



HP Software recommend scheduling a task using the AOI Preparation Tool to perform a daily update of all areas of interest. As this task is CPU intensive, it should be scheduled for a non-peak period. See Creating a Task on page 284.

You can select the areas of interest to display. Click **Configure Page** to view a list of possible areas of interest as shown in Figure 44. Select those you want displayed and click **Save**.

Figure 44. Select Areas of Interest to Display



Areas of Interest include the following types:

#### My Reports

A report, policy, service, etc. is 'yours' if you own it.

For details, see Changing Artifact Ownership on page 249.

#### Pending Reviews

Some assertions cannot be resolved automatically and require you to decide whether a validated document conforms to the requirements of an assertions (for example, quality requirements). These Areas of Interest list all reports where the final status is pending until manual validation is performed.

For details, see Manual Validation on page 203.

#### Policy Statistics and Compliance Status

After you resolve policy violating problems, you can reset the statistics for Areas of Interest. All artifact detail pages in Services, Policies, and Tools contain a Compliance context menu with the option to **Reset Compliance Statistics**. This tool deletes all reports for that artifact, policy, or assertion.

You can also delete all compliance reports in the SOA Systinet repository with the command-line reset tool.

For details, see "Reset Tool" in the HP SOA Systinet Administrator Guide.

## **Policy Pages**

The Policies tab includes several view pages, described in the following sections:

Policy and Report List Views on page 166

Index views of policies, reports and assertions.

Business Policy View on page 167

The business policy detail page.

• Technical Policy View on page 170

The technical policy detail page.

• Assertion View on page 173

The assertion detail page.

• Report Views on page 175

The various reports Policy Manager generates.

## Policy and Report List Views

Click one of the links in the Polices tab View menu to open a list view of that type of document:

Figure 45. List of Business Policies

Business Policies				Policies
tems or	e listed alphabetically. To narrow down the	list, please use the Filter tool.		
Views	*		Ne	w
Filt	ter Actions: Delete		3 He	ems
	Harne	Description	Modified	
	Minimum Requirements Production Busi	This policy ensures that WSDL documents associated with business services use coherent referencing of imp	Feb 7, 2007 5:32:34	4 PM
	Production Business Services Policy	This policy ensures that WSDL documents associated with production business services are compliant with W	Feb 7, 2007 5:32:34	4 PM
	Testing Business Services	All business services in 'testing' stage should fulfill this policy.	Jun 25, 2007 3:21:4	43 PM
Actio	ns: Delete			

You can reduce the list of policy artifacts using Filter.

Click **Filter** to open a query window:

To filter the list, enter your search parameter, select a column, and then click **Search**.

Click **Clear Filter** to remove the filter and restore the list of artifacts, or open the Filter menu and select **Edit Filter** to change the filter terms.

All policy list views contain a bulk delete function.

Select the policy artifacts from the list, click **Delete**, and then confirm.

The following functionality is specific to each policy artifact type:

#### Compliance Reports

Validate Compliance enables you to execute a new compliance check.

For details, see Chapter 16, Validating Artifacts.

#### Business and Technical Policies

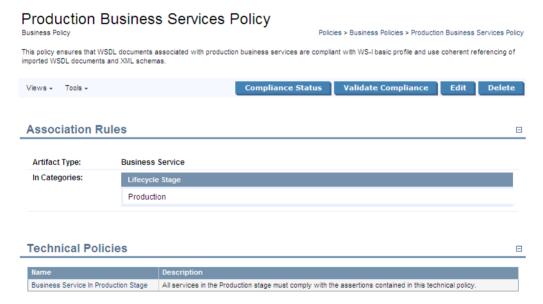
**New Business Policy** or **New Technical Policy** enable you to create new policy artifacts.

For details, see Creating Business Policies on page 185 and Creating Technical Policies on page 193.

## **Business Policy View**

Click the name of a business policy to open the business policy detail view:

Figure 46. Business Policy Details



The business policy detail view lists the technical policies and association rules of the business policy.

This following sections describe the content and functionality of these pages:

- Business Policy Page Context Actions on page 168
- Business Policy Page Content on page 169

#### **Business Policy Page Context Actions**

The grey bar contains the following context action menus and functions:

#### Views:

#### Revisions

View the revision history of the artifact.

For details, see Revision and Version History on page 238.

#### Advanced View

Switches to the detailed view of the artifact in the Tools tab.

For details, see Tools View on page 228

#### Tools:

#### All Governed Documents

Lists all documents associated with the business policy. You can run a business policy validation from this view.

For details, see Business Policy Validation on page 200.

#### Reset Compliance Statistics

Deletes compliance reports for this policy, which resets the relevant Area of Interest statistics.

#### Compliance Status

View the current compliance status of all artifacts associated with the business policy.

For details, see Business Policy Summary Reports on page 176.

#### • Validate Compliance

Validate the documents associated with the business policy against all its technical policies.

For details, see Business Policy Validation on page 200.



If a specified Additional Artifact associated with the business policy is missing from the repository, you are warned in the detail view. Validations performed on such a policy will automatically fail.

#### Edit

Open the Edit view of the business policy.

For details, see Editing Business Policies on page 190.

#### Delete

Delete the business policy.



Policy deletion is permanent. Deleted polices cannot be recovered.

## **Business Policy Page Content**

The Association Rules section includes the following information:

**Table 3. Association Rules** 

Artifact Type	The type of artifact to which the policy applies.
In Categories	The business policy applies to only those artifacts with the selected values in the selected categories.
Not In Category	As <b>In Categories</b> , except the business policy <i>does not</i> apply to those artifacts with the selected values in the selected category.
Exclude	The business policy does not apply to these specific artifacts.
Additional Artifacts	The business policy applies to these specific artifacts even if the category rules would exclude them.

The **Technical Policies** section lists all technical policies associated with an artifact. Click the name of a technical policy to open its detail view.

For details, see Technical Policy View on page 170.

## **Technical Policy View**

Click the name of a technical policy to open the technical policy detail view, shown in Figure 47. The detail view lists the policy's assertions and policy references.

Figure 47. Technical Policy Details

#### **Business Service In Production Stage** Policies > Technical Policies > Business Service In Production Stage All services in the Production stage must comply with the assertions contained in this technical policy Validate Compliance Delete Views -General Applicable to: **Business Service** Policy References (2) Systinet Best Practices Systinet Best Practices WS-I Basic Profile Policy Complete WS-I Basic Profile 1.1 policy Assertions (7) Business Service Must Be Documented Business Services must be sufficiently documented. They must contain references to detaile Contact Person Is Assigned The Business Service has a contact. Failure Impact Is Set Minor Failure impact must be set Has Implementation Normal The Business Service has an Implementation. Has SLO The Business Service must contain at least one Service Level Objective definition Is Consumable Minor The Business Service can be consumed Is Described by Keywords The Business Service must be described by appropriate keywords.

This following sections describe the content and functionality of these pages:

- Technical Policy Page Context Actions on page 171
- Technical Policy Page Content on page 172

## **Technical Policy Page Context Actions**

The grey bar contains the following context action menus and functions:

Views

#### Revisions

View the revision history of the artifact.

For details, see Revision and Version History on page 238.

#### · Advanced View

Switches to the detailed view of the artifact in the Tools tab.

For details, see Tools View on page 228

#### Validate Compliance

Run a compliance check of the technical policy against artifacts. The artifact types to which the policy may apply are listed in the General section as **Applicable to**.

For details, see Custom Validation on page 201.

#### Edit

Opens a view in to edit the technical policy.

For details, see Editing Technical Policies on page 197.

#### Delete

Delete the technical policy.



Policy deletion is permanent. Deleted polices cannot be recovered.

## Technical Policy Page Content

The content of the technical policy detail page is divided into the following sections:

#### General

The **Applicable to** field shows the source types of documents to which the technical policy applies.

#### Policy References

A table of other referenced technical policies.

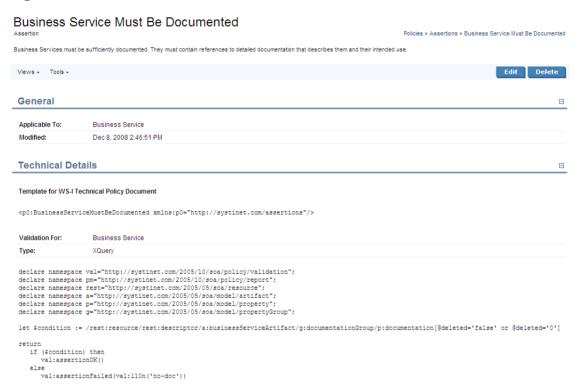
#### Assertions

A table of all assertions included in the technical policy, the severity of their violation, and their descriptions. Click the name of an assertion to open its detail view.

#### **Assertion View**

Click the name of an assertion in the **Assertions** list to open that assertion's detail view, shown in Figure 48.

#### Figure 48. Assertion Detail



An assertion detail view shows what types of document the assertion applies to, when it was last modified, and the categories to which it belongs. Assertion detail views include a toolbar with the following buttons and context action menus:

- Edit. Click this to change the assertion's name or description. You cannot change any of the assertion's technical details in SOA Systinet. HP provides the HP SOA Systinet Assertion Editor tool for this purpose.
- **Delete.** Click this to delete the assertion. Deleted assertions are *unrecoverable*.

- Views. The options in this menu are to see the Revision History or the Advanced View. The Advanced View is the assertion's detail page in the Tools tab, as described in Tools View on page 228. The assertion detail reopens in the last view you selected.
- Tools. The only available tool is Reset Compliance Statistics. This deletes compliance reports for this
  assertion, which resets the relevant Area of Interest statistics.

The **Technical Details** of an assertion include the reference template, validation handlers, and parameter definitions. These details are explained in the Assertion Schema chapter of the Reference Guide.

## Report Views

Compliance checks generate the following reports:

#### Business Policy Summary Report

Running a business policy validation generates a business policy summary report. This report lists a business policy's associated artifacts, says whether they complied with all of the associated technical policies, and gives a breakdown of how many assertions the artifact complied with, how many it violated and how many require manual review. It includes links to reports for each document.

For details, see Business Policy Validation on page 200 and Business Policy Summary Reports on page 176.

#### Document Summary Report

Validating an artifact against its associated business policies generates a document summary report. This lists an artifact's governing business policies, says whether the artifact complied with them, and gives a breakdown of how many assertions the artifact complied with, how many it violated and how many require manual review. It includes links to reports for each business policy.

For details, see Document Summary Reports on page 178

#### Document Report

A document report describes the compliance of an artifact and its related artifacts with the assertions contained in the policies used to validate the artifact.

For details, see Document Reports on page 180.

#### Business Policy Report

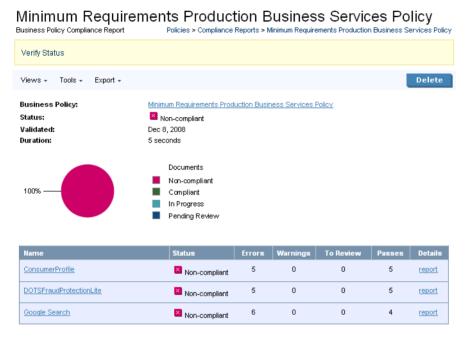
A business policy report describes the compliance of all artifacts associated with a business policy with the policy's constituent assertions.

For details, see Business Policy Reports on page 184.

#### **Business Policy Summary Reports**

A business policy validation, where all associated documents are validated against the business policy (see Business Policy Validation on page 200), produces a business policy summary report. Business policy summary reports show how many of the business policy's associated documents complied with all of its technical policies at the time of validation. Figure 49 shows the summary report for a business policy with three associated documents.

Figure 49. Best Practices for Business Services Summary Report



Generated on Dec 8, 2008 3:43:44 PM, Central European Time using view "Standard View".

Business policy summary reports feature the name of the business policy, the compliance status of its documents, the time of validation and a pie chart with the percentage of tested documents that complied with all the technical policies. The name of the policy is a link to its detail view. If the business policy was altered after the compliance validation was run, the version used for the validation is next to the name.

Business policy summary reports include a toolbar with the following buttons and context menus:

Views. The Standard View only lists business policies. The Detailed View lists all violated and pending
assertions for each business policy. The Responsibilities View shows the owner and the last modifier
of each validated document. When you select a view and then close and reopen a report, it reopens
displaying the last view you selected.

- **Tools**. Only the **Revalidate** tool is available. This tool validates the document against all associated business policies.
- **Export**. You can export the report as a PDF or CSV file.
- **Delete**. Deletes the report.

A table of tested documents occupies the bottom of business policy reports. The name of each document is a link to its detail page (see Tools View on page 228). You can see whether a document passed the latest validation, how many assertions it violated (**Failed**), how many it complied with (**Passed**) and how many still require manual validation (**To review**). Clicking **report** for a document opens its document report.

If the documents or policies changed since the validation generating the report was run, the report is no longer up to date. Click **Verify Status**, between the toolbar and the pie chart, to make sure the report is current.

#### **Document Summary Reports**

Validating a document against its associated business policies produces a document summary report. Document summary reports show how many business policies the document complied with at the time of validation. Figure 50 shows the summary report for a document validated against three business policies.

Figure 50. FTP Business Service Summary Report



Generated on Dec 8, 2008 3:51:12 PM, Central European Time using view "Standard View".

Document summary reports feature the name of the document, its compliance status, the time of validation and a pie chart with the percentage of business policies with which it complies. The name of the document is a link to its detail view (see Tools View on page 228). If the document was altered after the compliance validation was run, the version used for the validation is next to the name.

Document summary reports include a toolbar with the following buttons and context menus:

Views. The Standard View only lists business policies. The Detailed View lists all violated and pending assertions for each business policy. Business policy validation reports also have a Responsibilities View, which shows the owner and the last modifier of each validated document. When you select a view and then close and reopen a report, it reopens displaying the last view you selected.

- Tools. Only the Revalidate tool is available. This tool validates the document against all associated business policies.
- **Export**. You can export the report as a PDF or .csv file.
- **Delete**. Deletes the report.

Document summary reports include a table of business policies. (In the **Detailed View**, the violated and pending assertions are also listed under each policy.) The name of each policy is a link to its detail page (see **Business Policy View on page 167**). You can see whether the document complied with each policy, and for each policy how many assertions it violated (**Failed**), how many it complied with (**Passed**) and how many still require manual validation (**To review**). Clicking **report** for a business policy opens its detail report.

If the documents or policies changed since the validation generating the report was run, the report is no longer up to date. Click **Verify Status** to make sure the report is current.

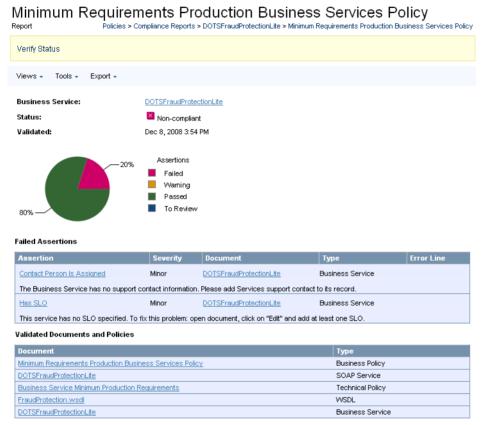
#### **Document Reports**

A document report describes the compliance of a document with business and/or technical policies. Document reports are generated in the following cases:

- During business policy validation. They are listed in the business policy summary report.
  - For details, see Business Policy Summary Reports on page 176.
- When a single resource is validated.

The report in Figure 51 was generated by a business policy validation using the Production Business Services Policy. It is listed in the business policy summary report for that validation.

Figure 51. FTP Business Service Report



Generated on Dec 8, 2008 3:55:10 PM, Central European Time using view "Standard View".

Document reports feature the name of the document, its compliance status, the time of validation and a pie chart with the percentage of assertions with which it complies. (Compare to the document summary report, Figure 50, which gives the percentage of business policies with which it complies.) The name of the document is a link to its detail page (see Tools View on page 228). If the document was altered after the compliance validation was run, the version used for the validation is next to the name.

Above the pie chart is a toolbar with the following buttons and context menus:

#### Views

The **Standard View** only lists failed and pending assertions. The **Full View** lists all assertions for each business policy. When you select a view and then close and reopen a report, it reopens displaying the last view you selected.

#### Export

You can export the report as a PDF or .csv file.

#### Delete

Deletes the report.

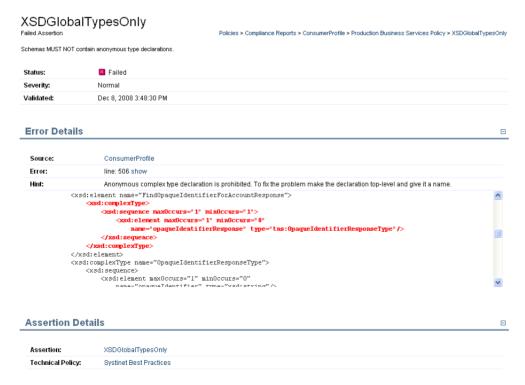
All violated and pending assertions are listed in a table beneath the pie chart. (In the **Full View**, passed assertions are listed as well.) For each assertion, the table shows:

- The name of the assertion. Clicking this opens the compliance status view of the assertion. Figure 52 shows the compliance status of the BP 2122 assertion when validating the GoogleSearch WSDL. It includes a copy of the WSDL document with the violation highlighted in red.
- The severity of the assertion.
- The specific document that violated the assertion.
- The type of document that violated the assertion.
- The line in the document where the violation occurred. Due to length, this appears beneath the other
  entries in the row.

The policies used to validate the document are listed in the **Validated Documents and Policies** table. Each name is a link to the policy, document or document detail page. The order in which these items is listed is, from top to bottom:

- Business policy used for validation, if applicable.
- Technical policies. If validation used a business policy, these technical policies are associated with that business policy.
- The document's name and type.
- Any other documents associated with the document and their types.

## Figure 52. BP 2122 Compliance Status View



# **Business Policy Reports**

A business policy report describes the degree to which a business policy's associated documents violate its constituent assertions. Business policy reports are generated when an document is validated against the business policies which govern it. In all other respects business policy reports are identical to document reports. See Document Reports on page 180 for details.

# 14 Managing Business Policies

Business policies are sets of documents with the technical policies with which they must comply. The procedures for managing business policies are covered in the following sections:

- Creating Business Policies on page 185
- Editing Business Policies on page 190
- Deleting Business Policies on page 191

# Creating Business Policies

You can create business policies from the menu on the left side of the **Dashboard** and **Policies** tabs and from the business policy list view.

## To create a business policy:

- 1 Do one of the following:
  - In the Policies or Dashboard New menu, click Business Policy.
  - In the list view of business policies, click New.

The New Business Policy page opens:

# **New Business Policy**

Policies > Business Policies > New Business Policy

Create a new business policy here. A business policy defines a set of artifacts (according to chosen criteria) and a list of technical policies that these artifacts must fulfill.



- 2 Input a name and description for the new business policy.
- 3 Do any of the following:
  - Click **Save** to create a draft policy. You can add association rules and technical policies later by editing the policy.

For details, see Editing Business Policies on page 190.

Add Association Rules.

For details, see Adding Association Rules to a Business Policy.

Add Technical Policies.

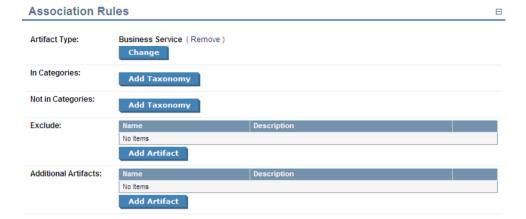
For details, see Adding Technical Policies to a Business Policy.

## Adding Association Rules to a Business Policy

In the New Business Policy or Edit Business Policy view, in the Association Rules section, click Select.
A list of document types appears.



- 2 Use Quick Find or the scroll bar to find the artifact type and then click the artifact type to select it.
  By default, the business policy applies to all artifacts of this type.
- 3 After selecting an artifact type there are a number of options available in the Association Rules section:



These options enable you to further filter the selection of artifacts that the policy applies to as follows:

Option	Use					
Artifact Type	Click <b>Change</b> to reopen the list of artifact types. Select a new one if required.					
In Categories	Click <b>Add Taxonomy</b> to open a list of taxonomies that apply to the selected artifact type.					
	Select a taxonomy to open a list of category values.					
	Click <b>add</b> next to a category to apply the business policy to artifacts with that category.					
	After you add category from a particular taxonomy use <b>Add Category</b> to add further categories from that taxonomy.					
	The business policy only applies to artifacts with the selected category values.					
Not In Category	The functionality is identical to <b>In Categories</b> .					
	The business policy does not apply to artifacts with the selected values.					

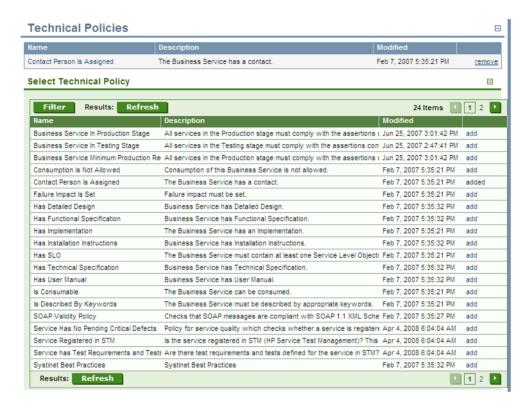
Option	Use			
Exclude	Click <b>Add Artifact</b> to open a list of all artifacts for the selected artifact types.			
	Use <b>Filter</b> to locate the artifact and click <b>add</b> next to the artifacts you want to exclude.			
	The business policy does not apply to these artifacts.			
Additional	The functionality is identical to <b>Exclude</b> .			
Artifacts	Use this feature to add artifacts that would otherwise be excluded by another rule. For example to include a specific business policy regardless of it's Failure Impact category as well as business policies in a Failure Impact category specified in <b>In Categories</b> .			

4 Click Save.

# **Adding Technical Policies to a Business Policy**

In the New Business Policy or Edit Business Policy view, in the Technical Policies section, click **Add Technical Policy**.

A list of technical policies appears.



- 2 Use Filter to locate the technical policy and click add for the technical polices you want to associate with the business policy.
- 3 Click Save.

# **Editing Business Policies**

Business policies can be edited from their detail views, described in Business Policy View on page 167.

### To edit an existing business policy:

In the business policies list view (see Business Policy View on page 167), find the business policy.

- 2 Click the name of the policy to open its detail view.
- 3 Click **Edit** in the detail view. The **Edit** page for that business policy opens.
- 4 You can now change the name, association rules and technical policies of the business policy. The procedure is identical to creating a business policy. See Creating Business Policies on page 185, starting at Step 2.

The **Revision History** records all changes made to a business policy. The **Revision History** can be viewed from a context action in the business policy's detail view. See Business Policy View on page 167.

# **Deleting Business Policies**

You can delete a business policy either from the business policy list view or the policy's detail view (see Policy and Report List Views on page 166 and Business Policy View on page 167).

- In the business policy list view, select the business policies you wish to delete and click **Delete Selected**.
- In the business policy's detail view, click **Delete** in the toolbar.
- Deleted policies are *unrecoverable*! (Equivalent to --purge on the command line)

# 15 Managing Technical Policies

The procedures for managing technical policies are covered in the following sections:

- Creating Technical Policies on page 193
- Editing Technical Policies on page 197
- Deleting Technical Policies on page 198

# **Creating Technical Policies**

You can create technical policies from the menu on the left side of the Policies tab and from the technical policy list view.

## To create a technical policy:

- 1 Do one of the following:
  - In the Policies New menu, click Technical Policy.
  - In the list view of technical policies, click **New**.

The New Technical Policy page opens:

# New Technical Policy

Policies > Technical Policies > New Technical Policy

Create a new technical policy here. A technical policy is a list of requirements that resources must fulfill. It consists of a set of assertions and references to other technical policies.



Cancel

- 2 Input a name and description for the new technical policy.
- 3 Do any of the following:

Add Assertion

• Click **Save** to create a draft policy. You can add policy references and assertions later by editing the policy.

For details, see Editing Technical Policies on page 197.

Add Policy References.

For details, see Adding Policy References to a Technical Policy.

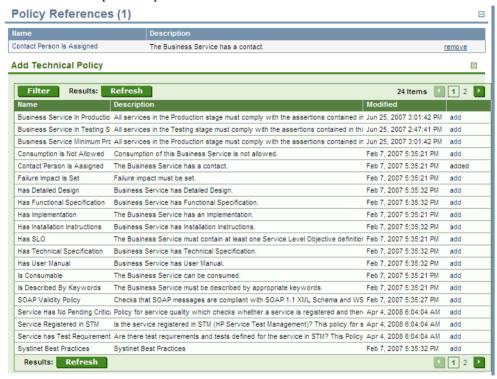
Add Assertions.

For details, see Adding Assertions to a Technical Policy.

### **Adding Policy References to a Technical Policy**

In the New Technical Policy or Edit Technical Policy view, in the Policy References section, click **Add Policy Reference**.

A list of technical policies opens.

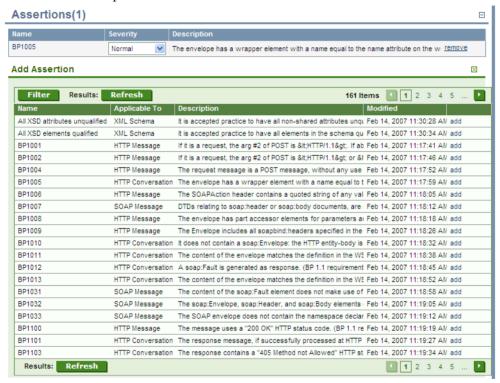


- 2 Use Filter to locate the technical policy and click add for the technical polices you want to add references to.
- 3 Click Save.

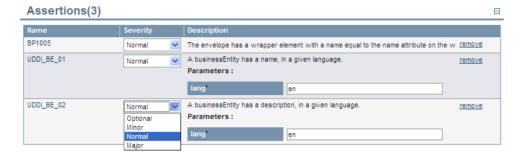
### **Adding Assertions to a Technical Policy**

In the New Technical Policy or Edit Technical Policy view, in the Assertions section, click **Add Assertion**.

A list of assertions opens.



- 2 Use **Filter** to locate the technical policy and click **add** for the assertions you want to add.
- 3 After adding assertions, select a **Severity** value for each assertion.
- 4 If an assertion includes parameters, you can change or set their values.



Parameters inherit any default values set in the assertion template and any non-optional parameters must be set.

For more details, see "Assertion Schema" in the HP SOA Systinet Reference Guide.

5 Click Save.

# **Editing Technical Policies**

Edit a technical policy to add or delete assertions and policy references or set the value of assertion parameters.

## To edit a technical policy:

- Find the technical policy in the list view of technical policies (see Policy and Report List Views on page 166).
- 2 Click the name of the policy to open its detail view.
- 3 Click **Edit** in the detail view. The **Edit** page for that technical policy opens.
- 4 Add or delete policy references and assertions.
- 5 To view an assertion's detail view, click its name.
- 6 Change the severity level of an assertion and/or the value of any parameters it has as when creating a technical policy, described in Creating Technical Policies on page 193.

## 7 Click Save.

# **Deleting Technical Policies**

You can delete a technical policy either from the technical policy list view or the policy's detail view (see Policy and Report List Views on page 166 and Technical Policy View on page 170).

- In the technical policy list view, select the technical policies you wish to delete and click **Delete Selected**.
- In the technical policy's detail view, click **Delete** in the toolbar.



Deleted policies are *unrecoverable*! (Equivalent to --purge on the command line)

# 16 Validating Artifacts

Validation is the process of checking artifacts against policies to verify their compliance.

You can perform validation is a number of different ways as described in the following sections:

• Artifact Validation on page 200

Validate a single artifact against all the business policies associated with it.

• Business Policy Validation on page 200

Validate all artifacts associated with a particular business policy.

• Custom Validation on page 201

Validate a single artifact against selected technical policies, for test purposes.

Manual Validation on page 203

Some assertions require a manual review of the artifact to determine its compliance.

• Compliance Status on page 204

Validate a single artifact against all the business polices directly associated with it and against any policies governing the current lifecycle stage for the artifact. This validation also generates a compliance status percentage for the artifact.

• Compliance Trends on page 206

Collate and track compliance status over time to detect compliance trends.

Validation Tasks on page 211

Creating automatic validation tasks.

Deleting Policy Reports on page 211

Deleting reports.

# **Artifact Validation**

An individual artifact may be associated with a number of business policies. You can perform a validation of the artifact against these policies.

#### To validate a artifact against all associated business policies:

- 1 Do one of the following:
  - From the Services tab, open the service view for the artifact.
  - From the Tools tab, open the detail view for the artifact.
- 2 Open the **Compliance** context action menu and select **Validate Compliance**.
- Validation runs automatically, generating a document summary report as described in Document Summary Reports on page 178.

You can schedule artifact validation to run automatically as an SOA Systinet task. For details, see Validation Tasks on page 211.

# **Business Policy Validation**

A business policy may be associated with a number of artifacts. You can perform a validation of these artifacts against the business policy.

## To validate all artifacts against a business policy:

- Open the policy view of the business policy to validate.
- 2 Click Validate Compliance.

Validation runs automatically, generating a business policy summary report as described in Business Policy Summary Reports on page 176.

You can schedule policy validation to run automatically as an SOA Systinet task. For details, see Validation Tasks on page 211.

You can run a business policy validation from a remote client with the client server-validate tool. For details, see "Validating Against Policy On Server" in the *HP SOA Systinet Developer Guide*.

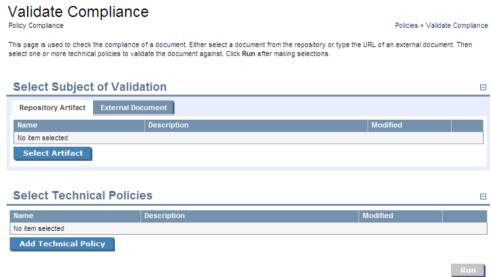
# **Custom Validation**

Select a single resource to check for compliance against one or more technical policies. This can be useful for testing purposes during resource or policy development.

## To check the compliance of a single resource:

- 1 Do one of the following:
  - From the **Policies** or **Dashboard** menu, select **Validate Compliance**.
  - From the policy view of a technical policy, click **Validate Compliance**.

The Validate Compliance page opens.



## 2 Do one of the following:

## • To validate a repository artifact:

Click **Select Artifact** in the **Repository Artifact** tab.

A list of document types appears.



- 2 You can narrow the list by typing part of the artifact type name in the **Quick Find** field.
- 3 Select an artifact type by clicking on it. A list appears of artifacts of this type. You can narrow down this list by clicking **Find**, which opens a filter dialog box, and typing a partial name.
- 4 Click **select** for the artifact you want to validate. Only one artifact can be selected.

#### To validate an external resource:

- Click the **External Document** tab to open it.
- 2 Type or paste the document URL.

- 3 If the document is secure, select **This resource requires authentication**, and type the username and password.
- 3 To select the technical policies to be used for the validation, click **Add Technical Policy**.
  - A list of technical policies appears.
- 4 You can narrow down this list by clicking **Find**, which opens a filter dialog box, and typing a partial name or selecting a category. If you launched the validation from a technical policy detail page in Step 1, that technical policy is already selected.
- 5 Click **add** for the technical policies you want to use.
- 6 Click **Run** to execute the validation.

Validation generates a document report as described in Document Reports on page 180.

# Manual Validation

Some assertions cannot be enforced automatically. They require a manual review of the artifact or resource being validated. When a validation is executed that involves such an assertion, Policy Manager informs you in these ways:

- The Latest Pending Reviews and Pending Reviews Older than Week areas of interest list the assertions requiring manual document review. For details, see Areas of Interest on page 163.
- The artifact reports or business policy reports that include the assertion list under **Assertions to Review**.

For details, see Document Reports on page 180 and Business Policy Reports on page 184.

## To manually review a document:

- In either the report or the **Pending Reviews** area of interest, click the assertion name. The assertion compliance status page opens.
  - To open the detail page of an artifact under review, click its name under **Documents**. You can also read the assertion or technical policy detail pages by clicking their names under **Assertion Details**.

2 To perform the review, click **Review**. The assertion's review page opens.

To open the detail page of a artifactunder review (see Tools View on page 228 and Service View on page 58), click its name under **Review Instructions** 



Depending on the conditions of the assertion, you may want to see an advanced view of the detail page. From the **Advanced View** you can open the **XML View**. All views are accessible from the **Views** context action menu.

- After reviewing the artifacts, select **Pass** or **Fail** in the assertion review page. If you select **Fail**, type in an explanation of why the artifact fails validation in the **Explanation** field.
- 4 Click **Save**. The document or business policy report page opens.

# Compliance Status

In addition to business policies directly associated with an artifact, there may be additional technical policies associated with a governance process lifecycle stage. When the artifact is at a particular lifecycle stage, these technical policies also apply to it.

The summation of these policy validations gives a compliance status for an artifact, expressed in terms of a percentage of policies that the artifact complies with.

SOA Systinet executes a Policy Compliance Task which performs a validation of all artifacts with applicable policies.

This task sets a new compliance status based on the results with an accompanying compliance status report. The compliance status is displayed in the artifact view sidebar and in all list views or tables of artifacts.

When an artifact changes, the compliance status becomes obsolete, indicated by parentheses. You can manually execute a compliance status validation.

## To execute a manual compliance status validation:

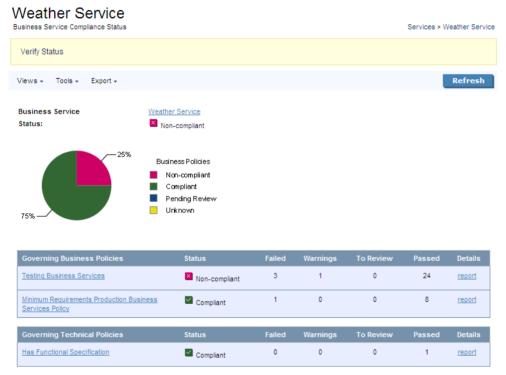
- Do one of the following:
  - In the Services or Tools detail view of an artifact, open the Sidebar to view the Compliance Status.

For details, see Sidebar on page 66.

In the Compliance Status section, click **Recalculate**.

• In the Policies tab My Compliance Status area of interest, click the artifact name to open the Compliance Status page, open the Tools menu, and select **Recalculate**.

The artifact is revalidated and a new compliance status calculated. The Compliance Status page opens to display the new results.



Generated on Nov 25, 2008 11:02:21 AM, Central European Time using view "Standard View".

The compliance status report contains a graph showing the overall compliance and the following sections:

#### Governing Business Polices

Displays the compliance status of the artifact for each business policy directly associated with the artifact with assertion status details.

#### Governing Lifecycle Policies

Displays the compliance status of the artifact for each technical policy associated with the current lifecycle stage for the artifact with assertion status details.

Click **Report** for a policy to view the validation report for the artifact against that policy.

You can collate and track compliance over time in order to evaluate compliance trends. For details, see Compliance Trends on page 206.

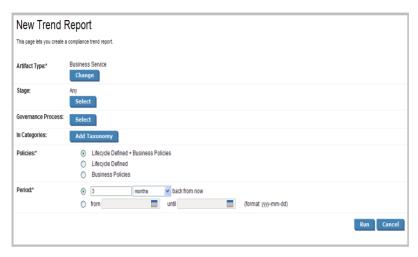
# Compliance Trends

Based on the compliance of artifacts generated on a daily basis, you can create a compliance trend report. For more details about compliance status, see Compliance Status on page 204.

## To create a compliance trend report:

In the New menu of the Polices tab, click **Trend Report** to open the New Trend Report page, as shown in Figure 53.

Figure 53. New Trend Report



- In the Artifact Type field, the default artifact is Business Service. To change the artifact type, click **Change** to open the Change Artifact Type view and select the new artifact type.
- 3 To restrict the trend report to specific lifecycle stages, in the Stage field, click **Select** to open the Select Lifecycle Stages section.
  - Select the lifecycle stages you require and click **OK**.
- 4 To restrict the trend report to artifacts governed by a particular governance process, in the Governance Process field, click **Select** to open the Select Governance Process section.
  - In the Governance Process field, click **Select** to open the Select Governance Process view, and then do one of the following:
  - Click **Select** next to the process you require.
- To restrict the trend report to artifacts categorized by specific taxonomic categories, in the In Categories field, click **Add Taxonomy** to open the Select Taxonomy section.
  - Click the taxonomy you require to view the available categories.

Click Add next to each category you require.

- 6 In the **Policies** field, select which policies to evaluate the compliance status trend for.
- 7 In the **Period** field, do one of the following:
  - Specify a number of days, weeks, months, or years.
  - Specify from and until dates.
- 8 Click Run.

The result is displayed in the **Trend Report** view.

Figure 54. Trend Report Summary





Generated on Nov 19, 2008 3:01:30 PM, Central European Time using view "Trends Summary Report".

To save or edit the trend report parameters, click **Save** or **Edit** to re-open the Trend Report parameters view. Enter the required parameters and click **Save**.



When you save a trend report, it executes automatically every night and is available as an Area of Interest on the main Policies page. For details, see Areas of Interest on page 163.

The trend report summary consists of two graphs. The top graph displays the overall compliance of artifacts for each day over the specified time period and the bottom graph displays the number of artifacts used to calculate the compliance figure for a particular day.



The compliance figure is a percentage of fully compliant artifacts. If an artifact fails any policy validation, it is non-compliant.

For longer time periods, the report does not display every day during the period. For example, for a report over three months, each entry in the graph is two or three days later than the previous one.

Both graphs enable you to drill down to the detail for a particular day.

Click a bar in the top graph or a plotted point in the bottom graph to open the Trend Report Detail page for the selected date.

Figure 55. Trend Report Summary



This report displays a compliance chart for the day and a table of validated artifacts with their compliance.

# Validation Tasks

You can create a task to perform a particular validation for manual execution or for scheduled at a particular time or on a periodic basis.

#### To create a validation task:

- Follow the procedure for creating a task described in Creating a Task on page 284, using the following steps as inputs.
- 2 Select the Validate Compliance tool.
- 3 Do one of the following:
  - To create an artifact validation task, select the set of artifacts to validate.

The task validates each artifact against any policies associated with it.

To create a policy validation task, select a set of policies to validate.

The task validates all artifacts associated with the selected policies.

# **Deleting Policy Reports**

On the **Compliance Reports** view page, you can select and delete individual reports. Every summary report and document report also has a **Delete** button for deleting that report.

Each Business Policy detail page and Assertion detail page has a **Reset Compliance Statistics** link in the **Tools** drop down menu. This tool deletes all reports for that policy or assertion. Similarly, every artifact in the **Tools** tab except technical policies has a **Reset Compliance Statistics** link in its **Tools** dropdown menu. Click this link to delete all reports for that artifact.

# Part V. Tools

- This part explains the features and use of the **Tools** tab, which is the place to organise and manage your SOA content. It includes the following sections:
- Chapter 17, Tools UI

Describes the user interface elements of the **Tools** tab.

• Chapter 18, Managing Content

Explains the procedures for managing the content of SOA Systinet.

• Chapter 19, Governance Tools

Describes the use of SOA Systinet governance tools, tasks and reports.

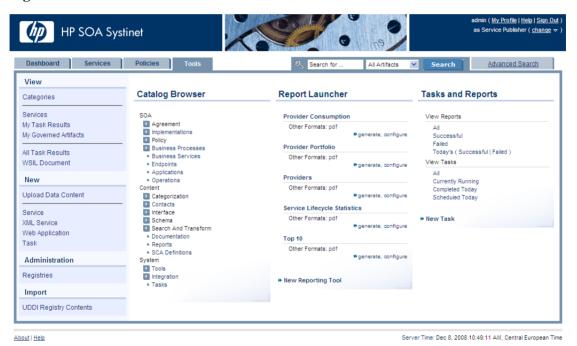
• Chapter 20, Advanced Searches

Describes the advanced search facilities of SOA Systinet.

# 17 Tools UI

The **Tools** tab gives access to Information Management offering a generic view of the content of SOA Systinet and access to administration and governance tools:

Figure 56. The Tools Tab



The Tools tab is split into the menu on the left, the **Catalog Browser** and a number of portlets in the main section of the page.

Each feature is explained in detail in the following sections:

Tools Menu on page 216

A description of the items in the **Tools Menu**.

Catalog Browser on page 220

The index portlet of artifact types in the repository.

Tasks and Reports Portlet on page 221

A portlet to access tasks and the reports on the results of those tasks.

Report Launcher Portlet on page 222

An access portlet for customized reporting tools.

The portlets in the **Tools** tab can be moved in the same way as described in Chapter 5, Dashboard

# Tools Menu

The Services menu is split into collapsible segments.

Each segment is described in the following sections:

• Tools View Menu on page 217

A set of links to artifact browse pages showing an index of the artifacts in the repository.

Tools New Menu on page 218

A set of links to create new artifacts:

Administration Menu on page 219

A set of administration links.

Registry Content Menu on page 219

Import content from a UDDI registry.

### Recent Documents

Quick links to the last few artifacts viewed.

### Tools View Menu

The View menu in the Tools tab provides links to artifact browse pages.

Figure 57. Tools View Menu



The View menu contains the following links:

### Categories

Browse the repository by taxonomic category.

For details, see Category Browsing on page 27.

### Artifact Names and List Views

Click to view an index of that artifact type or a list view in the Service tab.

For details, see Browse Artifact Pages on page 225 and List Views on page 56.

### WSIL Document

Access a Web Service Inspection Language (WSIL) format query view of the current Tools page.

This format can be passed to other products, for example MS Visual Studio, for the purpose of service discovery.



The query for the Tools tab itself generates a view of the published WSDLs in the repository.

# Tools New Menu

The New menu in the Tools provides quick links to create new artifacts.

Figure 58. Tools New Menu

New
Upload Data Content
Service
XML Service
Web Application Task
1031

The New menu links to the following artifact creation pages:

# Upload Data Content

Import a service infrastructure from a service definition document.

For details, see Publishing Services on page 107.

### Artifact Type Names

Create a new service artifact of the relevant type.

For details, see Creating an Artifact on page 242.

### Task

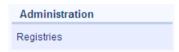
Create a new task to execute a governance tool.

For details, see Creating a Task on page 284.

### Administration Menu

The Administration menu enables you to browse integrated registries.

Figure 59. Registry Content Menu



The Administration menu contains the following link:

### Registries

View a list of registries integrated with SOA Systinet.

The administrator has additional options available in this menu. For details, see "Administering SOA Systinet" in the *HP SOA Systinet Administrator Guide*.

# Registry Content Menu

The Registry Content menu enables you to import content from a UDDI Registry.

Figure 60. Registry Content Menu



The Registry Content menu contains the following link:

### • Import Registry Content

Import a content from a UDDI Registry into the SOA Systinet repository.

For details, see Importing Services from Registries on page 113.

# **Tools Tab Portlets**

# Catalog Browser

The **Catalog Browser** is the entry point to the repository. From here all artifacts in the repository can be viewed:

Figure 61. Catalog Browser Portlet



The browser is split into the following sections matching the structure of the SDM described in the "Artifacts Taxonomy" section in the *HP SOA Systinet Reference Guide*:

### SOA

Artifact types for business services, their implementation and policies.

### Content

Artifact types associated with services such as documentation and metadata.

### System

Artifact types related to integration and governance tools and tasks.

To expand branches in the browser, click [+].

Click an artifact type to open its browse page.

For details, see Tools View on page 228.

# Tasks and Reports Portlet

The **Tasks and Reports** portlet on the **Tools** and **Dashboard** (administrator perspective only) tabs is the quickest access point to your SOA governance tasks and the results of their execution.

Figure 62. Tasks and Reports Portlet

# View Reports All Successful Failed Today's (Successful|Failed) View Tasks All Currently Running Completed Today Scheduled Today

The portlet includes the following sections:

• View Reports enables you to view reports according to the following categories:

- All displays all the reports in the repository, as described in Reports on page 288.
- Successful opens a browse view of all successful reports.
- **Failed** opens a browse view of all failed reports.
- Today's opens a browse view of all reports created today, today's successful reports, or today's failed reports.
- View Tasks enables you to view tasks according to the following categories:
  - All opens a browse view of all tasks in the repository.
  - Currently Running opens a browse view of tasks currently being executed.
  - Completed Today opens a browse view of all tasks completed today.
  - **Scheduled Today** opens a browse view of all tasks scheduled today.
- New Task. Click to create a new governance task, as described in Creating a Task on page 284.

Closing the portlet in the **Dashboard** adds a link to the **Add** section of the dashboard menu enabling you to restore the portlet to the **Dashboard** at any time.

# Report Launcher Portlet

The **Tools** tab contains a portlet specifically for reports generated by reporting tools. It contains default tools created by HP Software and user created tools with valid report definitions on the reporting server.

Figure 63. Report Launcher Portlet

# Report Launcher **Provider Consumption** Other Formats: pdf #generate, configure Provider Portfolio Other Formats: pdf ₩generate, configure Providers Other Formats: pdf ₱ generate, configure Service Lifecycle Statistics Other Formats: pdf #generate, configure Top 10 Other Formats: pdf ₩generate, configure ▶ New Reporting Tool

Click the report name to open the last report of its execution in html format.

Click **pdf** to view the report in that format.

generate executes the tool and switches to a view of the newly generated report.

configure opens the detail view of the associated reporting tool. Click **Edit** to make changes.

The default reporting tools are:

### Provider Consumption

Generates an overview of artifact consumption in the repository organized by the owner of the provided artifact..

### Provider Portfolio

Generates an overview of the artifacts in the repository that are potentially consumable.

### Providers

Generates an overview of the artifacts in the repository that are available for consumption.

### Service Lifecycle Statistics

Generates a summary of governed artifacts for each stage in the service lifecycle.

### Top 10

Generates a summary of the top consumers and publishers of services and the services with the most users.

Click **New Reporting Tool** to create a new reporting tool.

For details, see Creating a Reporting Tool on page 277.

# **Tools Pages**

In the **Tools** tab there are a number of different pages describing the artifacts in the repository. This chapter describes:

• Browse Artifact Pages on page 225

Are the index views of artifacts.

• Tools View on page 228

Are the detailed view of artifacts in the repository.

Navigator View on page 236

Displays a graphical representation of an artifact and its relationships.

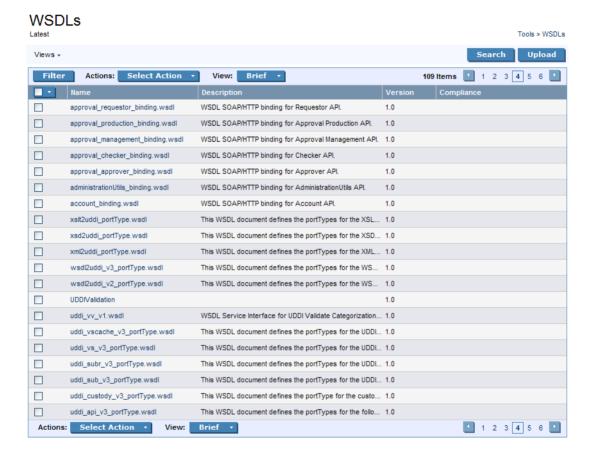
Revision and Version History on page 238

Displays previous revisions of artifacts.

# **Browse Artifact Pages**

From the Catalog Browser of the Tools tab, click an artifact type to open the browse artifact page:

Figure 64. Browse WSDLs Page



These pages list all the artifacts of the selected artifact type.

Click **Filter** to filter the list by column headings or artifact categories.

To filter the list, click one of the listed taxonomic categories, or enter your search parameter, select a column, and then click **Find**.

Click **Clear Filter** to remove the filter and restore the list of artifacts, or open the Filter menu and select **Edit Filter** to change the filter terms.

The Views menu offers a set of alternative views of the artifact type:

### Approved

Select **Approved** to only show the latest revisions of the artifacts approved in lifecycle management.

For details, see Chapter 11, Lifecycle Governance.

### Latest

Select **Latest** to show the latest revisions of the artifact type collection.

### Deleted

Select **Deleted** to show deleted revisions of the artifact type collection.

### XML View

Opens an XML view of the page in the REST interface.

### RSS View

Opens an RSS view of the page that can be used to create an RSS content feed for the Dashboard.

### Access Rights

Open a view of the access permissions for the artifact type collection.

Click an artifact to open its detail view. For details, see Tools View on page 228.

The available functions vary depending on the artifact type and they include:

### New

Open the Create New Artifact page allowing the creation of a new artifact.

For details, see Creating an Artifact on page 242.

### Upload

Create artifacts based on the content of an external resource and import the document the repository.

For details, see Publishing Services on page 107.

### New Link

Create an artifact representing an external resource with only a link to the external resource. The resource is not imported to the repository.

For details, see Adding Documentation on page 256.

### Search

Create an advanced search for the artifact type.

For details, see Chapter 20, Advanced Searches.

Browse views also enable you to carry out bulk operations on selected artifacts using the **Actions** menu.

The available bulk operations vary depending on the artifact type.

# To perform a bulk operation:

• Select the service artifacts you require, and open the **Select Actions** menu.

The menu offers the following bulk operations:

### Edit Access Rights

The owner of an artifact or administrator can edit the permissions of selected artifacts.

For details, see "Access Rights" in the HP SOA Systinet Administrator Guide.

### Edit Category Bag

Change the categorization for the selected artifacts.

For details, see Categorizing Artifacts on page 252.

### Change Owner

Change the person or group responsible for the artifact.

For details, see To manually change artifact ownership:.

### Synchronize

Perform change management on the selected artifacts.

For details, see Running the Synchronization Tool on page 279.

# Change Version

Create new versions of the selected artifacts.

For details, see Managing Versions on page 259.

### Delete

Mark the selected artifacts as deleted.

For details, see Deleting an Artifact on page 247.

### Export to Registry

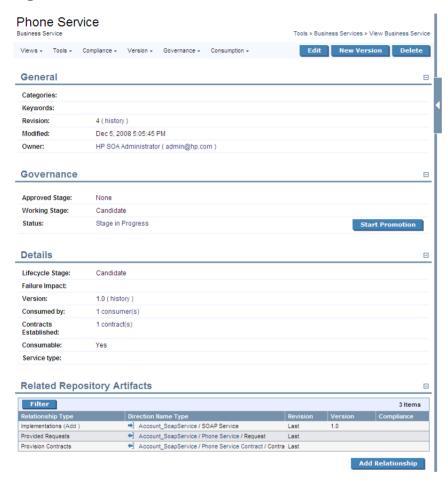
Export the selected artifacts to an integrated UDDI Registry.

For details, see Exporting Data To Registry on page 265.

# **Tools View**

Clicking an artifact name in the Tools tab opens a detailed artifact view for that artifact:





This detail view contains all the information about that artifact with options to edit, delete and add relationships.

This following sections describe the content and functionality of these pages:

• Tools View Context Actions on page 230

### Tools View Page Content on page 234

The Sidebar is also available in the Tools detail view. For details, see Sidebar on page 66.

### **Tools View Context Actions**

The grey bar contains a set of context action menus and functions.

The actions vary depending on the artifact but they include:

### Views:

### Consumer View

Switches to the Services view of the last approved revision of the artifact for artifacts subject to lifecycle management.

For more details, see Chapter 11, Lifecycle Governance.

### Services View

Switches to the service view of the artifact in the Services tab.

For details, see Service View on page 58.

### Navigator View

Opens a graphical representation of the artifact and its relationships.

For details, see Navigator View on page 236.

### Revisions

View the revision history of the artifact.

For details, see Revision and Version History on page 238.

### Access Rights

Opens a view of the access permissions for the artifact.

For details, see "Edit Access Rights" in the HP SOA Systinet Administrator Guide.

### XML View

Opens an XML view of the page in the REST interface.

### RSS View

Opens an RSS view of the page that can be used to create an RSS content feed for the dashboard.

### Tools:

### Associated Reports

A list of the reports related to this artifact.

For details, see Reports on page 288.

### Dependency Analysis and Impact Analysis

Execute the impact management tool on the artifact.

For details, see Impact Tools on page 272.

### Add Documentation

Add an associated document.

For details, see Attaching Documentation to Artifacts on page 257.

### Change Owner

The administrator or owner of the artifact to can transfer ownership to a different user.

For details, see Changing Artifact Ownership on page 249.

### Download Content

Create an archive containing all the service infrastructure referenced by a single definition document, for example a WSDL. Any artifacts

This functionality is effectively the reverse operation compared to **Upload Content**. For details of the relevant definition document types, see Publishing Services on page 107.

### Compliance:

### • Validate Compliance

Validate the policy compliance of an artifact.

For details, see Chapter 16, Validating Artifacts.

### Compliance Status

View the compliance status of the artifact.

For details, see Report Views on page 175.

### Effective Policies

View the business policies associated with the service artifact.

### Reset Compliance Statistics

Delete all compliance reports associated with the artifact.

### Version:

### Versions

View the version history for the artifact.

For details, see Revision and Version History on page 238.

### Version Navigation

Open specific next, previous, or last versions of the artifact.

### Governance

### • Start Governance

Enter the artifact into a lifecycle process.

For details, see Starting Artifact Governance on page 141.

### Start Promotion

Request artifact promotion to the next lifecycle stage.

For details, see Submitting a Promotion Request on page 143.

### View Stage Details

View the page showing the details for the current lifecycle stage.

### Promotion History

View the promotion request and voting details for each previous lifecycle stage.

### Consumption:

### Pending Requests

View the list of outstanding consumption requests for the artifact.

### Accepted Requests

View the list of accepted consumption requests for the artifact.

# Rejected Requests

View the list of rejected requests for the artifact.

### Edit

Change the attributes of the artifact.

### New Version

Create a new version of the artifact.

For details, see Managing Versions on page 259.

### Delete

Mark the artifact as deleted with a further option to purge it from the repository.

# Tools View Page Content

Other information on the page varies, depending on the artifact type. Information categories include:

### General

displays the taxonomic categories of the artifact, the version with a link to the revision history, the owner of the artifact and its last modified date.

### Governance

Service artifacts subject to lifecycle management display the last approved stage and the current stage with options to view the stage details, view changes since the last approved version, and to start promotion to the next lifecycle stage.

For details, see Chapter 11, Lifecycle Governance.

### Details

Lifecycle, failure impact, version, and contract information for artifacts.

### Data

Artifacts associated with external documents display the location of the associated resource. Click the resource name to view it, click **View Server Folder** to view that repository location, or click **Update/Upload** to change the associated resource.

For artifacts subject to change management the synchronization status is also shown with options to update the cached version.

For details, see Running the Synchronization Tool on page 279.

### Related Repository Artifacts

The relationships that the artifact has with other repository content. **Add Relationship** allows you to associate the artifact with another in the repository.

For details, see Adding a Relationship on page 248.

### Service Quality

If you integrate SOA Systinet with *HP Service Test Manager* (STM), SOAP Services display a section for service quality statistics from STM.

This section enables you to register a service with STM and then displays information about requirements, tests, and defects from STM.

For details, see Service Test Manager Integration Features on page 73.

### Performance and Availability

The content of this section depends on which product you integrate SOA Systinet with.

• If you integrate SOA Systinet with *HP Business Availability Center* (BAC), this section displays statistics generated by BAC and enables you to open the BAC view of the service artifact.

For integration details, see "Setting Up BAC/UCMDB Integration" in the *HP SOA Systinet Administrator Guide*.

For feature details, see BAC/UCMDB Integration Features on page 68.

• If you integrate SOA Systinet with *HP SOA Policy Enforcer* (SPE), this section enables you to open the SPE view of the service artifact if it is shared with SPE.

For integration details, see "Setting Up SOA Policy Enforcer Integration" in the *HP SOA Systinet Administrator Guide*.

For feature details, see SOA Policy Enforcer Integration Features on page 71.

### Service Discovery

If you import a service artifact from an external source, such as *HP Business Availability Center* (BAC), this section displays the source of the original service and its change management status. There are options to display the discovery details, or import changes.

For details, see Synchronizing Discovered Services on page 123.

### Registry Synchronization

If you integrate SOA Systinet with UDDI Registries, this section displays each registry and the status of the service artifact compared to that registry. There are synchronization options depending on the relative status of the artifact with each registry.

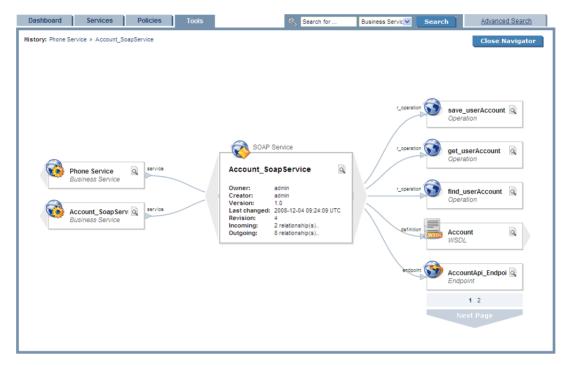
For details, see Registry Integration on page 263.

# **Navigator View**

The navigator view displays a graphical representation of an artifact and its relationships to other artifacts.

Access the navigator view from the service or tools view of an artifact. Select **Navigator View** from the **Views** menu.

Figure 66. Navigator View



The main section in the middle of the view displays details of the artifact. On the left are parent artifacts that the artifact depends on, and on the right are child artifacts that the artifact impacts on.

Click an artifact name to switch the navigator view to that artifact.

Click the magnifying glass icon of an artifact to switch to the detailed view of the artifact.

Click Close Navigator to go back to the detail view of the original artifact.

**History** displays the navigation history within the navigator view. Click an artifact name to switch to that artifact.

# Revision and Version History

During the lifecycle of resources and artifacts stored in the database, their properties or content may change. SOA Systinet supports revisions and versions.

Any update of a resource automatically increments its revision number. A resource may be updated by the Synchronization Tool or by a user changing any property such as the name, description, etc.

The version number is manually controlled.

For details, see Managing Versions on page 259.

# To open the revision history of an artifact:

- Do one of the following:
  - In the Tools view of an artifact, in the General section click **history**, next to the revision number.
  - In the Services view or the Tools view of an artifact, open the View context menu and click Revision History.

# To open the version history of an artifact:

- Do one of the following:
  - In the Tools view of an artifact, in the Details section click **history**, next to the version number.
  - In the Services view or the Tools view of an artifact, open the Version context menu and click Versions.

Figure 67. Account SOAP Service Revision History



To compare versions or revisions, select two from the list and click **Compare**.

To view the content of a past revision or version, click the revision or version number.

In the view of an older revision or version, click **Latest Revision** to view the latest revision of the artifact or open the Views menu to navigate through revisions.

In the version history, open the Views menu and select **Approved Versions** to only show the list of versions approved in Lifecycle Management.

In the view of an older version, open the Versions menu to navigate through versions.

In the view of an older revision, the Views menu contains the context action **Copy as New Revision**. This enables you to create a new revision of the resource with the content of the old revision you are viewing.

# 18 Managing Content

There are four main types of content in SOA Systinet

### Artifacts

All entities in the repository are artifacts and there are generic procedures for most artifacts described in Managing Artifacts on page 241.

### Documentation

Many artifacts require additional documents describing their purpose or use. Managing Documentation on page 256 describes the procedures for adding and using documentation.

### Metadata

Information about the structure and format of the data in your repository can also be published as described in Managing Definition Data on page 259.

### Taxonomies

Using categorization groups allows you to further organize the content of your repository. The SOA Systinet UI can be used to manage taxonomies in the same way as other artifacts but we recommend using HP SOA Systinet Taxonomy Editor.

# Managing Artifacts

The main artifact management procedures are:

- Creating an Artifact on page 242
- Editing an Artifact on page 242
- Deleting an Artifact on page 247

- Adding a Relationship on page 248
- Changing Artifact Ownership on page 249
- Categorizing Artifacts on page 252
- Notifications on page 253

# Creating an Artifact

The process of creating an artifact is very similar for most artifact types.

### To create an artifact:

From the browse page of any artifact type, click **New** to start the artifact creation process.



By default, the **New** button in browse screens is disabled for artifacts with associated data content. These artifact types have an **Upload** button which uses the publisher functionality.

For details, see Publishing Services on page 107.

The administrator can enable the creation of these artifact types without uploading the associated data content.

For details, see "Configuration Options" in the HP SOA Systinet Administrator Guide.

2 The exact details for each artifact type differ.

Input the artifact details, and then click Save.



To start governance of the artifact, see Starting Artifact Governance on page 141.

# **Editing an Artifact**

You can edit artifacts.

Editing is not available for governed artifacts awaiting promotion or rollback approval. For details, see Governing Artifacts on page 140.

### To edit an artifact:

- In the detail view of an artifact, click **Edit** to open the edit view of the artifact.
- 2 Change any parameters and use the functionality in the **Related Repository Artifacts** section to manage relationships.
- 3 Click **Save** to commit your changes and create a new revision of the artifact. See Revision and Version History on page 238 for details.

# **Bulk Operations**

Many artifact management tasks may be performed in bulk as well as individually.

Wherever there is a list of artifacts (for example in list views, browse pages, and tables of search results) there are a set of options enabling bulk operations as shown in Figure 68.

Figure 68. Bulk Operations



The overall process for bulk operations is the same for each different action:

### To perform a bulk operation:

- In the table of artifacts, select the artifacts to perform the bulk operation on.
- 2 Click the **Select Action** drop-down arrow and select from the following actions:

### • Edit Access Rights

The owner of an artifact or administrator can edit the permissions of selected artifacts.

For details, see "Access Rights" in the HP SOA Systinet Administrator Guide.

### Edit Category Bag

Change the categorization for the selected artifacts.

For details, see Categorizing Artifacts on page 252.

### Change Owner

Change the person or group responsible for the artifact.

For details, see Changing Artifact Ownership on page 249.

### Synchronize

Perform change management on the selected artifacts.

For details, see Running the Synchronization Tool on page 279.

### Change Version

Create new versions of the selected artifacts.

For details, see Managing Versions on page 259.

### Delete

Mark the selected artifacts as deleted.

For details, see Deleting an Artifact on page 247.

### Export to Registry

Export the selected artifacts to an integrated UDDI Registry.

For details, see Exporting Data To Registry on page 265.

3 The exact details for executing each action vary but they execute in the same way.

Bulk operations may involve large numbers of artifacts. SOA Systinet executes these operations as asynchronous tasks.

When the operation starts, the original page opens with an information bar showing the progress of the task.

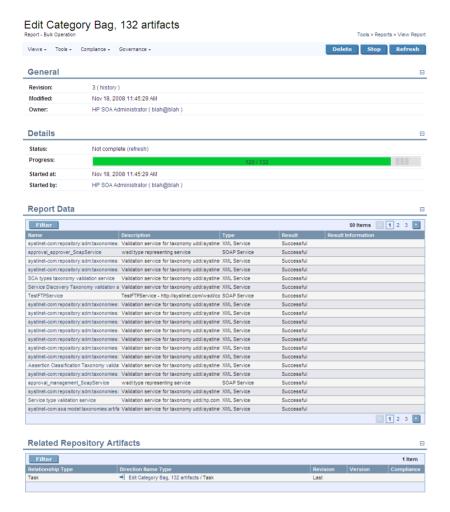
### **Implementations**



Bulk operations execute asynchronously so you can continue with other work while the task finishes. Each bulk operation offers the option to receive a notification e-mail when the task completes.

You can monitor tasks in progress in the Dashboard My Task Results portlet. For details, see My Task Results Portlet on page 39.

Alternatively, select **Click here for a detailed report** to view the task in progress or the finished report.



5 The Bulk Operation Report displays the current status of the task, with an option to **Stop** the task if required.

Stopping a task may take some time as all unprocessed artifacts are added to the final report. Stopping a task is also asynchronous so you can continue with other work. If you requested a notification it is sent on completion of the report.

The Report Data section displays the results for each artifact subject to the bulk operation.

# Deleting an Artifact

You can delete artifacts individually or in bulk.

Deletion is not available for governed artifacts awaiting promotion or rollback approval. For details, see Governing Artifacts on page 140.

### To delete artifacts:

- 1 Do one of the following:
  - In Services or Tools browse pages select the artifacts to delete, open the Actions menu and select
     Delete.
  - In Services or Tools artifact views, click **Delete**.

The Delete Artifacts page opens.

- Select **Delete Subartifacts** if you want to delete related secondary artifacts from the same lifecycle process as well.
- 3 Select **Ignore Incoming References** to delete the artifact even if there are incoming relationships from other artifacts in the repository. For example a SOAP service referenced from a Business Service.
- 4 Select **Non-Recoverable Deletion** to purge the artifacts from the repository instead of just marking them as deleted.
- 5 Select **Notify on Completion** to receive an e-mail when the task completes.
- 6 Click **Delete** to delete the selected artifacts.

# Adding a Relationship

At the heart of SOA Systinet is the ability to link artifacts together with relationships.

### To add a relationship to an artifact:

Click **Add Relationship** in any detail view to open the **Add Relationship** page:



There are numerous types of relationships, the choices available depend on the particular artifact type.

- 2 Select the relationship type and click **Next**.
- 3 The format of this choice will depend on the artifact and relationship type.

Do one of the following:

- Use **Filter** function to search for the required artifact.
- Click New, Upload, or New Link to create a new artifact to be the object of the relationship.

For details, see Creating an Artifact on page 242.

 Click Upload to create a new artifact with associated external content to be the object of the relationship. For details, see Publishing Services on page 107.

 Click New Link to create a new documentation artifact with a link to external content to be th object of the relationship.

Select the artifacts to associate and then click **Next** to continue.

4 Review the details and click **Finish** to create both the relationship and the inverse relationship.

# Changing Artifact Ownership

You can change the ownership of artifacts to other users or groups, changing ownership is available manually for a single artifact and as a bulk operation for a set of artifacts. You can also set up an automatic action to change artifact ownership as a result of a lifecycle change.

### To manually change artifact ownership:

- 1 Do one of the following:
  - To change the owner of a single artifact:

From the View page of the artifact, select **Tools**  $\rightarrow$  **Change Owner**.



The Change Owner action is only available for the administrator or owner of the artifact.

The Change Owner – Select Documents page opens showing the artifact and any related child artifacts.

• To change the owner of multiple artifacts:

From the browse page of an artifact type, select the artifacts to change, and select **Select Action Change Owner**.

The Change Owner – Select New Owner page opens.

Skip to Step 3.

2 In the Select Documents page, if the artifact is governed by a lifecycle process, select whether to **Restrict to Governed Artifacts**.

Select the artifacts to change ownership, and click Next.

The Change Owner – Select New Owner page opens.

In the Select New Owner page, select the **Group** or **User** tab, and enter a search term in the Search For input, and then click **Go**.

Use asterisk (\*) as a wildcard.

Matching users or groups are listed.

4 Click **Select** next to a user or group to select it as the new owner, and then click **Next**.

The Change Owner – Summary page opens.

- 5 In the Summary page, do any of the following:
  - For multiple artifacts governed by a lifecycle process, select **Include Subartifacts** to include secondary related artifacts in the change of ownership.
    - For bulk change ownership, if you are not the administrator, only artifacts that you own change to the new owner.
  - Select **Send Notification E-mails** to notify users of the ownership change.

SOA Systinet notifies original owner and the new owner of the artifact.

6 Click **Finish**.

# To define an automatic change owner action:

To set up an automatic lifecycle change owner action, in the Stage Definition page of a governance process, expand **Add Action** and select **Change Owner**.

The Change Owner page opens.

For details about setting a Stage Definition, see Defining Lifecycle Stages on page 130.

- 2 Select **Include Sub-Artifacts** to apply the ownership change to associated secondary artifacts as well.
- 3 Select **Send Notification E-mails** to automatically send mails to the old and new owners.
- 4 In the New Owner section, click **Select**.

The Select User or Group pane opens.

- 5 In the Select User or Group pane, do any of the following:
  - To select a user:
    - 1 Select the **Users** tab.
    - In the **Search for** field, enter the user name to locate (use an asterisk (\*) as a wildcard), and then select whether you want to search by **Full Name** or **Login Name** from the drop down menu.
    - 3 Click **Go** to show matching search results.
    - 4 Click Select next to the user name.

The selected user is used as the new owner.

- To select a group:
  - Select the **Groups** tab.
  - 2 In the **Search for** field, enter the group name to locate (use an asterisk (\*) as a wildcard).
  - 3 Click **Go** to show matching search results.
  - 4 Click **Select** next to the group.

The selected group is used as the new owner.

6 Click **OK** to return to the Stage Definition page.

The new Change Owner action is added to the Actions list.

# Categorizing Artifacts

SOA Systinet enables you to apply taxonomic categories to artifacts.

### To categorize an artifact:

In the Tools view of an artifact, click **Edit** to open the edit view of the artifact.

The categories are organized by taxonomy in the General section.

- 2 In the Edit view, do any of the following:
  - To add a category from a new taxonomy. click **Add Category** to open a list of taxonomies. Select a taxonomy, and click **Add** to select a category from that taxonomy.
  - To add a category from an existing taxonomy, click Add under the taxonomy box, and click Add
    to select the category.
  - To remove a category, click the red X next to the category.
  - To remove all categories in a taxonomy, click **Remove All** under the taxonomy box.
- 3 Click **Save** to commit your changes and create a new revision of the artifact.

# To categorize a set of artifacts:

- In a Services list view or Tools browse view for a set of artifacts, select the artifacts to edit.
- 2 Open the Select Actions menu, and select **Edit Category Bag**.

The Edit Category Bags page opens.

3 In the Edit Category Bags page, do any of the following:

- Select Include Subartifacts to apply the changes to related secondary artifacts in the same lifecycle process.
- Select **Update** to amend the current categories, or **Replace all Categories** to remove all existing categories.
- Select **Notify on Completion** to receive an e-mail notification when the task completes.
- To add or remove categories, use **Add Category** open a list of taxonomies. Select the taxonomy and then click **Add** to add a specific catagory.
- 4 Click **Save** to make your changes.

### **Notifications**

SOA Systinet enables you to send e-mail notifications to artifact stakeholders. You can send manual notifications or set up automatic notifications to be sent as a result of lifecycle changes.

The possible recipients of the notification are described in Table 4.

**Table 4. Notification Recipients** 

Recipient	Description
Owner	The user or group that owns the artifact. For details, see Changing Artifact Ownership on page 249.
	For policy compliance reports this option is called  Artifact Owner and refers to the owner of the artifact that the report is about.
Maintainers	Users and groups with write permission for the artifact.
Contacts	Users and groups associated with the artifact by the contact relationship or listed in the artifact stakeholder property. For details, see Adding Contacts on page 79.
Contractors	Users and groups who maintain consuming artifacts. For details, see Chapter 12, Managing Contracts.
Providers	Users and groups who maintain the providing artifacts. For details, see Chapter 12, Managing Contracts.
Other Recipients	Click <b>Select</b> and use the user and group search feature to add any other required recipients.
Previous Stakeholders	Expand <b>Show Advanced Options</b> and select <b>Include Recipients from Previous Versions</b> to notify stakeholders from previous versions of the artifact about changes to a newer version.
	The stakeholders notified by this option match those for the current artifact version. For example, if <b>Contractors</b> is selected, then the contractors for previous versions are notified.

## To send or set up notifications:

- 1 Do one of the following:
  - To send a manual notification, in the artifact or report view, select **Tools** $\rightarrow$ **Notify**.

The Notify page opens.

• To set up an automatic notification, in the Stage Definition page of a governance process, expand **Add Action** and select **Notify**.

The Notification Message page opens.

For details about setting a Stage Definition, see Defining Lifecycle Stages on page 130.

2 For automatic notifications, select the event to trigger the notification from the **Send When:** drop-down list.

For details, see Table 2.

3 Select the recipients to notify.

For details, see Table 4.

- 4 Enter a message subject for the mail.
- 5 For automatic notifications, select **Lifecycle Status** and **Compliance Status** to include sections containing this information in the mail.

For policy compliance reports, select **Compliance Status** to include the compliance graph in the notification.

- 6 Enter the message text for the mail.
- 7 Click **Preview** to view a draft of the mail message.
- 8 Click **OK** to send the notification or save the notification action.

## Managing Documentation

The main document management procedures are:

- Add a new document to the repository, as described in Adding Documentation on page 256.
- Attach documentation to an artifact, as described in Attaching Documentation to Artifacts on page 257.
- Edit the source document, as described in Editing Documentation on page 258.

## Adding Documentation

You may want to store documents in the SOA Systinet repository or create documentation artifacts linked to external documents.

#### To create a new documentation artifact:

- In the Tools tab Catalog Browser click **Documentation** to open the Documentation page.
- 2 Do one of the following:
  - Click Upload to use the SOA Systinet publisher functionality to create a documentation artifact with associated data content.

For details, see Publishing Services on page 107.

Click New Link to create a link to a document on a remote location.

For details, see To create a documentation artifact with a link to external content:.

Click New to create a documentation artifact without cached content or a link to an external
document.

For details, see Creating an Artifact on page 242.



This option is only available if enabled by the administrator.

For details, see "Configuration Options" in the HP SOA Systinet Administrator Guide.

#### To create a documentation artifact with a link to external content:

- In the Tools tab Catalog Browser click **Documentation** to open the Documentation page.
- 2 Click **New Link** to open the New Link page.
- 3 In the New Link page, input the following parameters:

Parameter	Definition	
URL	The location of the document to link the new artifact to.	
Type	Select a document type from the drop-down list.	
Link Text	The name of the new documentation artifact.	
Description	A description for the new artifact.	

## Attaching Documentation to Artifacts

Once a documentation item is stored in the repository it can be attached to other repository resources with a documentation relationship.

#### To attach a document to an artifact:

- In the detail view of the artifact click **Add Relationship**.
- 2 Select **Documentation** and click **Next**.
  - Not all artifacts types have **Documentation** as an available relationship type.
- 3 Do one of the following:
  - Use **Filter** to search for the required document in the repository.

- Click New, Upload, or New Link to add a new document as described in Adding Documentation on page 256.
- 4 Select the document from the list and click **Next**.
- 5 Review the relationship and click **Finish** to create it.

If you later want to detach documentation from the artifact, edit the artifact and remove the relationship as described in Editing an Artifact on page 242.



This procedure can be used to add documentation to a business service but an alternative is provided in the **Services** tab as described in Adding Service Documentation on page 79.

## **Editing Documentation**

Both the properties and the source of a documentation artifact can be edited.

#### To edit a documentation artifact:

- In the detail view of the documentation artifact, click **Edit**.
- 2 Change any artifact attributes as required.
- 3 Click **Save** to confirm your changes.

#### To change the external source document:

- In the detail view Data section of the documentation, click **Update**.
- 2 Input or use **Browse** to select a new source document.
- 3 Click **Save** to upload the new document.

## Managing Definition Data

SOA Systinet includes extended support for SOA specific resources, such as WSDL documents and XML schemas. This support includes features such as automatic import resolution during publishing and updates, and change management support based on synchronization policies.

Supported definition formats are:

- WSDL documents
- XML schema documents
- DTD documents
- XSLT stylesheets
- SCA Definitions
- BPEL Process Definitions

#### To publish a resource artifact:

- In the Tools tab Catalog Browser click the relevant artifact type to open the browse page.
- 2 Click Upload to use the SOA Systinet publisher functionality to create a definition artifact with associated data content.

For details, see Publishing Services on page 107.

Definition documents are updated and edited in the same way as documentation.

For details, see Editing Documentation on page 258. In the procedure replace documentation with the relevant definition artifact types.

## Managing Versions

SOA Systinet enables you to create new versions of artifacts individually or in bulk. Two types of version can be created, depending on the significance of the change to the artifact:

#### New Branch

A version created as a result of a major change to an artifact, which requires the commencement of a new artifact lifecycle.

When a new major version of an artifact is created, SOA Systinet; creates a new copy of the original artifact, with it's own independent lifecycle. This makes it possible to have multiple versions of the same artifact in different lifecycle stages in the same repository.

For example, version 1.0 of an implementation artifact can describe a service approved for production use, while version 2.0 of the same implementation artifact can be in development.



New Branches may only be initiated from an individual artifact view. Bulk versioning only allows a Version Number Update.

#### Version Number Update

A version created as a result of a minor change in the data or metadata of the artifact, which does not require the creation of a new artifact. Only the value of the version property changes and a new revision created.

#### To create a new branch version of an artifact:

In the Services or Tools view of an artifact click **New Version**.

The New Version page opens.

- 2 Select **New Branch**.
- 3 Select **Notify on Completion** to receive an e-mail notification when the task completes.
- 4 Expand **Show Advanced Options** and optionally select from the following options:
  - Select Backwards Compatible if you want to mark the new version as compatible with the current version.

By default, if the current version of the artifact is subject to governance, the new version of the
artifact is entered into the same governance process as the current version but at the starting stage
of the process.

To enter the new version into a different governance process, select **Change Lifecycle Process** and select the governance process to use.

• If the artifact is governed by a lifecycle process, select **Include Subartifacts** to open a list of related child artifacts related to the current version.

For each subartifact toggle the check-box to select the following options in the Action column:

#### Skip

A new version of the subartifact is not created and no relationship is created with the new version of the parent artifact.

#### New Version

A new version of the subartifact is created and associated with the new version of the parent artifact.

#### Reuse

The existing subartifact is associated with the new version of the parent artifact.

To create a new version for all subartifacts, click **Select All**.

To remove a selection for all subartifacts, click **Deselect All**.

#### 5 Click Save.

When creating a New Branch, for each new version of an artifact, a new artifact is created with the specified version number and required properties copied from the current version. Child relationships are determined by the options chosen for subartifacts.

For service implementations the new version of the implementation copies any relationship with parent business services.

#### To update the version number of an artifact:

In the Services or Tools view of an artifact click **New Version**.

The New Version page opens.

- 2 Select Version Number Update.
- 3 Enter the new version number.
- 4 If the artifact is governed by a lifecycle process and you want the version number update to be applied to subartifacts, expand, **Show Advanced Options**, and select **Include Subartifacts** to open a list of related sub artifacts. Otherwise, proceed to Step 6.
- 5 Select the subartifacts you want to apply the new version number to.

To select all subartifacts in the tree, click Select All.



Selecting a subartifact changes the status in the Action column to **New Version**. Subartifacts which have not been selected retain the status **Skip**.

#### 6 Click Save.

For Version Number Updates, the version number of the selected artifacts is modified and all relationships maintained.

### To create new versions for a set of artifacts:

- In a list view or table of artifacts, select the artifacts to version.
- 2 Expand **Select Actions** and select **Change Version**.

The Change Version page opens.

- 3 Select Include Subartifacts to apply the changes to related secondary artifacts in the same governance process.
  - There is no option to select which subartifacts to apply the version number update to for bulk versioning.
- 4 Input the new version number.
- 5 Select **Notify on Completion** if you want to receive an e-mail when the versioning task is complete.
- 6 Click **Change Version** to apply your changes.

Bulk versioning executes as an asynchronous task allowing you to continue with other work. The task can be monitored or stopped. For details, see Bulk Operations on page 243.

The version history of an artifact is available in the Service and Tools view of an artifact. Open the Version menu and select **Version**.

For details, see Revision and Version History on page 238.

## Registry Integration

SOA Systinet provides customizable mapping between UDDI entities and SDM artifacts. Mapping of the basic structures (types) is predefined, but several aspects can be significantly changed by mapping additional artifact properties to UDDI keyed references and vice versa.



Before any data transfer takes place between SOA Systinet and a UDDI registry, a registry artifact must be created, registry certificates must be imported to SOA Systinet, and the taxonomies must be synchronized.

For details, see "Setting Up Registry Integration" in the HP SOA Systinet Administrator Guide.

SOA Systinet artifacts correspond to registry entities as follows:

SOA Systinet Artifact	Registry Entity
Organization unit	Business entity
Business service	tModel
Implementation	Business service
Endpoint	Binding template
Custom (WS-Policy)	tModel

#### This section describes:

- Registry Synchronization on page 264
- Exporting Data To Registry on page 265
- Deleting Data From a Registry on page 268

Importing Services from Registries on page 113 explains how to import registry data as part of "Service Discovery".

## Registry Synchronization

Each artifact that corresponds to a UDDI entity contains a **Registry Synchronization** section in its detail view:

Figure 69. Registry Synchronization Details

# Registry Synchronization Registry Status [∞] HP SOA Registry at registry003 Not Synchronized export [∞] HP SOA Registry at registry002 Synchronized import | export | delete

Its synchronization status is shown and synchronization actions (export/import/delete) are offered for each known UDDI Registry.

**Table 5. Synchronization Status** 

Synchronization Status	Description	
Not Synchronized	SOA Systinet artifact does not correspond to any UDDI entity. It is not exported to UDDI or imported from UDDI. This synchronization status corresponds to the NEW resource status.	
Synchronized	SOA Systinet artifact and corresponding UDDI entity are semantically the same, both are the same since the last synchronization. This synchronization status corresponds to the IDENTICAL resource status.	
Local change	SOA Systinet artifact has changed (while the corresponding UDDI entity has not) since the last synchronization. This synchronization status corresponds to the LOCAL CHANGE resource status.	
Remote change	The corresponding UDDI entity has changed since the last synchronization. This synchronization status corresponds to the REMOTE CHANGE resource status.	
Local+Remote change	Both the SOA Systinet artifact and the corresponding UDDI entity have changed since the last synchronization. This synchronization status corresponds to the NEEDS MERGE resource status.	
Unreachable	The UDDI registry is unreachable to check the synchronization status. This synchronization status corresponds to the UNREACHABLE resource status.	

## Exporting Data To Registry

You can export artifacts to an integrated registry individually or in bulk.

## To export an individual artifact to a UDDI registry:

In the **Registry Synchronization** section of the detail view of the artifact, click **export** for the registry that you want to export the artifact to.



Only organizational unit, business service, implementation and WS-policy artifacts can be exported directly.

- 2 Provide the login name and password of the UDDI registry account where the data will be exported, and then click Next.
  - For a successful export, the credentials used for registry sign-on must have the appropriate write permissions for the registry entities being created or amended.
- 3 Select the associated artifacts to export on the summary page. If you are exporting a business service, all its implementations can be exported as well and if you are exporting an organizational unit, all its business services can also be exported.
  - If the registry server artifact has a specific environment category, then only uncategorized endpoints or endpoints with the matching category are listed. Uncategorized endpoints are not selected for export by default.
- 4 Click **Finish** to export the selected artifacts.

When the export process begins, an export report is created. The export process may take some time, so click **Refresh**. You may have do this several times until the report is complete (and **Refresh** disappears).

The most important part of the report is the Report Data section within the sub-report:

ata			E
HP SOA Re	gistry at registry002		
Туре	Artifact Name	Uddi Registry Key	Status
Business Service	GoogleSearchService	uddi:e7c46870-b63a-11dd-8903-6f98f3018902	IDENTICAL
SOAP Service	GoogleSearchService	uddi:6253e310-c142-11dd-8419-1c9666218415	IDENTICAL
Endpoint	GoogleSearchPort_Endpoint	uddi:63aff0a0-c142-11dd-8419-1c9666218415	NEW
PortType TModel		uddi:636ad150-c142-11dd-8419-1c9666218415	NEW
Binding TModel		uddi:638ead00-c142-11dd-8419-1c9666218415	NEW
	HP SOA Re  Type  Business Service  SOAP Service  Endpoint  PortType TModel	HP SOA Registry at registry002  Type Artifact Name  Business Service GoogleSearchService  SOAP Service GoogleSearchService  Endpoint GoogleSearchPort_Endpoint  PortType TModel	### Business Service   GoogleSearchService   Uddi Registry Key    Business Service   GoogleSearchService   uddi:e7c46870-b63a-11dd-8903-6f98f3018902    \$OAP Service   GoogleSearchService   uddi:6253e310-c142-11dd-8419-1c9666218415    Endpoint   GoogleSearchPort_Endpoint   uddi:638ff0a0-c142-11dd-8419-1c9666218415    PortType TModel   uddi:636ad150-c142-11dd-8419-1c9666218415

It shows exactly what was exported, and the export status of all the exported items.

Parameter	Definition	
state	State	Description
	IMPORTED	The item was successfully imported.
	EXPORTED The item was successfully exported.	
	DELETED The item (Business Service or Binding Template) was delete from the UDDI registry during export because the corresponding artifact had been deleted in SOA Systinet.	
	FAILED	An error occurred during the export/import of the item.
artifact type	the UDDI entity type: Business Entity, Business Service, SOAP Service, etc.	
artifact name	the SOA Systinet artifact name	
uddi registry key	the unique id of the corresponding UDDI entity	
status	the synchronization status before the import/export was performed	

### To export a set of artifacts to a UDDI registry:

In any list view or table of artifacts, select the artifacts to export, and then select **Select Action Export to Registry**.

The Export Artifact to Registry page opens.



Artifacts associated with the selected artifacts are included in the export with the exception of endpoints. Only endpoints with the same environment category as the registry server artifact are exported.

- 2 Select the registry to export to and input the credentials to use.
- 3 Select **Notify on Completion** if you want to be informed by e-mail when the export is complete., and then click **Next**.
- 4 For bulk export, optionally select a business entity to associate the exported artifacts with, and then click **Finish**.

The original page re-opens showing a task bar at the top of the page. The export task executes asynchronously so you can either wait for the task to complete or continue with other work and return to view the report later.

Select Click here for detailed report to open the Registry Export - Bulk Operation report.

The Report Data section contains details of the exported artifacts and the export success or failure.



For exported binding templates, the WSDL repository URL is used by default with the following exceptions:

- If the registry artifact is categorized for an environment then an environment specific WSDL URL is used. For details, see the **Download WSDL** functionality in Adding Endpoints on page 93.
- If the registry artifact is not categorized for an environment then the WSDL URL from the repository REST location space is used.

To disable the use of repository URLs for WSDLs and enforce the use of the originURL (where the WSDL was imported from) set the following property in

SOA\_HOME/conf/setup/configuration.properties:

platform.integration.uddi.useRepositoryUrlOnWsdlExport=false

Consider this option if the repository is not your primary artifact store.

## Deleting Data From a Registry

Entities in a synchronized registry can be deleted from the registry directly from SOA Systinet.

## To delete an entity from a UDDI registry:

In the **Registry Synchronization** section of the detail view of an artifact, click **delete** for the registry that you want to delete the artifact from.

- The delete functionality is also available from the detail view of artifacts already deleted from the repository, and in the dialog for deleting an artifact from the repository.
- Provide the login name and password of the UDDI registry to delete the data from, and then click Next.
  - For a successful delete, the credentials used for registry sign-on must have the appropriate write permissions for the registry entities being deleted.
- Review the entities to be deleted. If you are deleting a business service, all its implementations are also deleted, and if you are deleting an organizational unit, all its business services are also deleted. Click **Finish** to delete displayed list of artifacts.

# 19 Governance Tools

SOA utilities in the **Tools** tab consist of three elements:

Tools on page 271

Are the basic utilities for performing governance actions.

Tasks and Scheduling on page 284

Enable the use of a tool on an artifact or set of artifacts with the option of periodic or scheduled execution.

Reports on page 288

Are the result of a task or tool execution.

## Tools

SOA Systinet provides the following types of utility in the **Tools** tab:

Impact Tools on page 272

Report the potential impact of a change to an artifact on the other artifacts it depends on or impacts.

Job Tools on page 274

Are customized tools created to perform miscellaneous tasks.

• Reporting Tools on page 275

Use customized reports to query the repository.

Sync Tools on page 278

Update the repository with the latest versions of externally sourced documents.

Policy Compliance Tools on page 284

Verify whether artifacts conform to business policy.

## Impact Tools

Impact tools enable you to report on all the related artifacts that may be impacted by a change to a specific artifact. Using impact tools, you can check the dependency trees or impact trees of an artifact.

In SOA Systinet, a dependency between artifacts is represented by a relationship. Each relationship represents a dependency between two related artifacts: a source artifact and a target artifact. A relationship is a unidirectional concept. Each relationship contains references to the source artifact, target artifact, type of relationship and several other attributes. For example, consider relationship R which has references to source artifact A and target artifact B. This would mean that artifact A depends on artifact B and that artifact B has impact on artifact A. Accordingly, there are two types of relationship tree: the impact tree and the dependency tree. The impact tree of an artifact shows the artifacts that it has impact on. The dependency tree shows the artifacts on which this artifact depends.

You can create new impact tools or use the **Impact Management** tool provided with SOA Systinet.

#### This section describes:

- Running the Impact Management Tool on page 272
- Impact Reports on page 273
- Creating an Impact Tool on page 273

#### Running the Impact Management Tool

The context action for the Impact Management Tool is available in the detail view and service view of artifacts (see Tools View on page 228 or Service View on page 58).

#### To assess the impact of a change to an artifact:

• In the detail view or service view of the artifact, move the cursor over the **Tools** context menu and select **Impact Analysis** or **Dependency Analysis** depending on which tool you want to execute.

#### Impact Reports

Impact reports are generated by running the impact tool as described in Running the Impact Management Tool on page 272 or the result of automated tasks as described in Tasks and Scheduling on page 284.

To access impact reports, browse the reports as described in Reports on page 288 and filter for report category **Impact Management**.

The most important part of the impact report is the **Report Data** section:

Figure 70. Impact Report Data



Figure 70 shows that Account Service is dependant on the Account SOAP Service which also has dependencies on an operation and a WSDL.

Phone Service is also a consumer of Account Service, so the dependencies of the Phone Service are displayed as well.

Note that the Phone Service also depends on the Account SOAP Service implementation but the breakdown of the Phone Service dependencies is not repeated.

Artifacts highlighted in blue appear multiple times in the report indicating that they have multiple impacts.

## Creating an Impact Tool

Impact tools enable you to assess the potential impact of a change to an artifact.

#### To create a new impact tool artifact:

- In the **Catalog Browser**, click [+] next to **Tools** to expand it and show the list of tool types.
- 2 Click **Impact Tools** to open the **Browse Impact Tools** page.
- 3 Click **New** to open the **Publish Impact Tool** dialog.
- 4 Input the following parameters:

Parameter	Definition	
Name	The name for the new impact tool	
Description	A description of the impact tool	
Choose impact type	Select one of the available impact types	

5 Click **Save** to create the new impact tool.

This new impact tool is now available for selection when creating a task, as described in Creating a Task on page 284.

### Job Tools

Job tools enable you to use customized Java class implementations to perform a variety of actions.

You can create new job tools or use the **Report Cleaner Job Tool** provided with SOA Systinet.

This section describes:

- Creating a Job Tool on page 274
- Report Cleaner Job Tool on page 275

## Creating a Job Tool

SOA Systinet enables you to create miscellaneous tools in association with your own Java classes.

#### To create a new job tool artifact:

- In the **Catalog Browser**, click [+] next to **Tools** to expand it and show the list of tool types.
- 2 Click **Job Tools** to open the **Browse Job Tools** page.
- 3 Click **New** to open the **Publish Job Tool** dialog.
- 4 Input the following parameters:

Parameter	Definition	
Name	The name for the new job tool	
Description	A description of the job tool	
Categories	Click <b>add category</b> to select a category from the available taxonomies (administrator perspective only)	
Job Implementation Class ID	The class ID in the server configuration	

5 Click **Save** to create the job tool.

This new job tool is now available for selection when creating a task, as described in Creating a Task on page 284.

## Report Cleaner Job Tool

SOA Systinet is installed with the report cleaner tool. This tool is a utility for purging the repository of deleted and orphaned reports. HP Software recommend that a task be created to run this tool on a periodic basis to ensure that the repository does not fill up with obsolete reports. See Tasks and Scheduling on page 284 for details.

## Reporting Tools

Reporting tools enable you to access customized reports stored on the reporting server for the purpose of periodic or timed execution using tasks.

SOA Systinet comes provided with preinstalled reporting tools which are available in the **Report Launcher** portlet (see Report Launcher Portlet on page 222).

This section describes:

- Running a Reporting Tool on page 276
- Reporting Tool Reports on page 276
- Creating a Reporting Tool on page 277

#### Running a Reporting Tool

The context action for reporting tools is available in the **Report Launcher** portlet for the default reporting tools provided with SOA Systinet and any user created tools with valid URIs.

#### To execute a reporting tool:

- In the **Report Launcher** portlet click **Generate** for the required reporting tool.
- 2 The view switches to the resulting report as described in Reporting Tool Reports on page 276.

## **Reporting Tool Reports**

Reporting tool reports are generated by running one of the default reporting tools as described in Running a Reporting Tool on page 276 or the result of automated tasks as described in Tasks and Scheduling on page 284.

To access reporting tool reports, browse the reports as described in Reports on page 288 and filter for report category **Reporting**.

The most important part of the impact report is the **Report Data** section:

Figure 71. Reporting Tool Report Data

Report Data		
Title:	Top 10	
Author:	admin	
Content Description	:	
Report Status:	finished	
Report:	Top 10	
Other Formats:	pdf	

This section provides progress and success details of the report and links to rendered versions of the report on the reporting server.

## Creating a Reporting Tool

Reporting tools enable you to utilize custom reports deployed to the reporting server.



The SOA Systinet Report Editor can be used to create and modify report definitions. After these definitions are deployed to the reporting service, they are then available to be associated with a reporting tool. See the SOA Systinet Report Editor documentation for more information.

## To create a reporting tool artifact:

- In the **Catalog Browser**, click [+] next to **Tools** to expand it and show the list of tool types.
- 2 Click **Reporting Tools** to open the **Browse Reporting Tools** page.
- 3 Click **New** to open the **Publish Reporting Tool** dialog
- 4 Input the following parameters:

Parameter	Definition	
Name	The name for the new reporting tool	
Description	A description of the reporting tool	

Parameter	Definition	
Categories	Click <b>add category</b> to select a category from the available taxonomies (administrator perspective only)	
Report Definition	Select from the list of available report definitions from the reporting service	
Additional Parameters	Depending on the report definition additional parameters may be input	

#### 5 Click **Save** to create the new reporting tool.

This new reporting tool is now available for selection when creating a task, as described in Creating a Task on page 284, or for immediate execution as described in Running a Reporting Tool on page 276.

## Sync Tools

SOA Systinet stores all resources in its repository. They can be divided into two types: representational artifacts and local copies of imported resources. Sync tools focus on these imported resources. Such resources have a cached flag set and the origin URL associated with them. Sync tools are a powerful feature that make it possible to keep track of original resources, notifying the user about changes to them and maintaining up-to-date copies.

You can create new sync tools or use the Change Management tool provided with SOA Systinet.

#### This section describes:

- Synchronization Policy on page 278
- Running the Synchronization Tool on page 279
- Change Management Reports on page 281
- Creating a Sync Tool on page 283

## Synchronization Policy

Externally sourced resources may have an associated synchronization policy. Automatic change management uses this policy to determine the action that should be performed during synchronization.

The following options are available:

#### Automatic

The cached resource is updated automatically if the original resource is changed.



In order for automatic synchronization to function you must create a scheduled change management task. See Tasks and Scheduling on page 284 for details.

#### Manual

The resource is marked with an out-of-sync flag and only updated after user approval. If you want to approve the change and update the document, run the change management tool as described in Running the Synchronization Tool on page 279.

#### Disabled

The cached resources will not be updated, except by a manual update of a single resource from a context action.



Resources stored in a database may (and usually do) consist of imports of other resources. For example a WSDL file may contain imports of other WSDLs and XSDs. XSDs may contain imports of other XSDs or DTDs, etc. The result is a dependency tree with the WSDL that the user wants to publish or update at its root. The synchronization policy is usually associated with the root resource, but it is also applied to the other dependent resources in the tree.

## Running the Synchronization Tool

All artifacts that can be checked or updated have an associated Data section in their Tools detail page. These include WSDLs, XSDs, DTDs and Documentation.

Figure 72. Data Section

Data		⊟
Available at:	/admin/uddi/account/wsdl	View Server Folder   Update
Source:	http://czvm20.devlab.ad:8080/uddi/account/wsdl	
Synchronization Status:	IDENTICAL	Synchronize
Last Update:	Dec 3, 2008 11:30:18 AM	

The following actions can be performed on artifacts associated with external documents:

- Available at functionality is available for resources uploaded from local or remote locations.
  - Resource name

Click the resource name to open the version stored in the repository.

#### View Server Folder

Opens the repository location where SOA Systinet stores the resource.

#### Update

Updates a cached resource if the original has changed from the local file to the existing repository server folder.

**Update** opens the Update data page, requesting the new file, with an Advanced Option to **Remove Unsynchronized** artifacts if they are no longer referenced by the new version of the data content.

#### Upload

If the artifact does not have associated data content, Upload enables you to add content from a local file.

**Upload** opens the Upload data page, requesting the new file and Server Folder to store the data content.

**Remove Unsynchronized** can apply if you upload a file to a Server Folder where a file with the same name already exists.

- In addition, resources uploaded from remote locations have the following functionality:
  - Source name

Click the source name to open it in the remote location.

#### Synchronize

The synchronization status is shown. Click **Synchronize** to start the publishing process.

Select **Remove Unsychronized** artifacts to remove relationships to artifacts no longer referenced by the new version of the file, and then click **OK** to upload the latest version of the remote resource.

From Service list views and Tools browse pages you can synchronize artifacts in bulk.

Select the artifacts to synchronize, open the Actions menu, and select **Synchronize**.

The Synchronize page opens, review the artifacts to synchronize, select **Notify on Completion** to receive an e-mail notification when the task completes, and then click **Synchronize**.



When performing change management on a collection, only resources with an associated synchronization policy are checked or updated. If change management is performed on a single resource, the synchronization policy is not taken into account. Only resources for which you have write permission are checked or updated.

## Change Management Reports

Change management reports are generated by running the change management tool as described in Running the Synchronization Tool on page 279 or the result of automated tasks as described in Tasks and Scheduling on page 284.

To access change management reports, browse the reports as described in Reports on page 288 and filter for report category **Change Management** or from the Change Management section of **browse view** or **detail view** pages as described in Running the Synchronization Tool on page 279.

Select one of these by clicking the name to view the index report for that change management execution.

To view the result for a particular artifact, in the Sub reports section click the **Change Management Report** link for the artifact you are interested in.

The most important part of the change management report for an artifact is the **Report Data** section:

Figure 73. Change Management Report Data

Report Data Filter Actions: Select Action • 12 Items uddiclient-core.xsd uddiclient-core.xsd Identical Dec 3, 2008 11:30:26 AM Dec 3, 2008 11:30:26 AM delete\_userAccount wsdl Identical Dec 3, 2008 11:30:26 AM Identical enable\_userAccount wsdl find userAccount wsdl Identical Dec 3, 2008 11:30:26 AM get\_userAccount Identical Dec 3, 2008 11:30:26 AM wsdl Dec 3, 2008 11:30:26 AM save\_userAccount wsdl Identical AccountApi\_Endpoint Identical Dec 3, 2008 11:30:26 AM wsdl Account\_SoapService Identical Dec 3, 2008 11:30:26 AM wsdl account.xsd Identical Dec 3, 2008 11:30:26 AM Dec 3, 2008 11:30:26 AM account\_portType.wsdl account\_portType.wsdl Identical account\_binding.wsdl Dec 3, 2008 11:30:26 AM account\_binding.wsdl Identical Account wsdl Identical Dec 3, 2008 11:30:26 AM Actions: Select Action •

This section displays the name of the artifact, its location in the repository and the location of the external document it represents and the status of the update or status check.

The possible statuses are:

Status	Definition
NEW	The resource is new
IDENTICAL	The cached resource was identical to the original
IDENTICAL (NO- PERMISSION)	The cached resource was identical to the original and the current user does not have permission to change it

Status	Definition
UNREACHABLE	The original resource is unreachable, possibly due to a network error, or because the server is not running
OUT-OF-SYNC	The cached resource differed from the original and was not updated. Root resources with imports (complex resources) are also set to out-of-sync if any of the imported resources is new, out-of-sync or unreachable
UPDATED	The cached resource differed from the original and was updated
CHANGED-IGNORED	The cached resource differed from the original but was not updated
CHANGED-IGNORED (NO-PERMISSION)	The cached resource differed from the original but was not updated because the current user does not have permission
CHANGED-IGNORED (UNEXPECTED- CONTENT)	The resource was not updated, because unexpected content was retrieved from the original location (for example badly formed xml)
NO-PERMISSION	The current user does not have permission to change this resource
UNKNOWN	The state was unknown

## Creating a Sync Tool

Sync tools enable you to track changes to external documents associated with artifacts in the repository.

## To create a sync tool artifact:

- In the Catalog Browser, click [+] next to Tools to expand it and show the list of tool types.
- 2 Click **Sync Tools** to open the Browse Sync Tools page.
- 3 Click **New** to open the Publish Sync Tool dialog box.
- 4 Input the following parameters:

Parameter	Definition
Name	The name for the new sync tool
Description	A description of the sync tool

Parameter	Definition
Categories	Click <b>add category</b> to select a category from the available taxonomies (administrator perspective only)

5 Click **Save** to create the new sync tool.

This new impact tool is now available for selection when creating a task, as described in Creating a Task on page 284.

## Policy Compliance Tools

Policy compliance tools validate whether artifacts conform with the requirements of one or more business policies.

Perform a compliance check using the provided **Validate Compliance** tool and the reports generated are described in detail in Chapter 16, Validating Artifacts.

## Tasks and Scheduling

A *task* is an artifact which associates other artifacts or resources with a tool. You can imagine it as a tool prepared for execution. A task is powerful way of performing an action on the same set of resources repeatedly. The specified resources are used as input when the tool is run. A task can be run manually but it is more usual to schedule automatic execution.

This section describes:

- Creating a Task on page 284
- Setting a Schedule on page 285

## Creating a Task

Tasks are the way SOA Systinet associates a particular tool with a set of artifacts to produce reports.

#### To create a new task:

1 Do one of the following:

- In the New menu of the Tools tab, click **Task**.
- Alternatively, in the Tools tab, in the Tasks and Reports portlet (see Tasks and Reports Portlet on page 221), click New Task.
- Alternatively, in the browse view of tasks click **New**.

The Publish Task page appears.

- 2 Use Filter to search for the tool to associate with the task. Select the tool, and then click Next to select the artifacts to examine.
- 3 The selector page includes the following options:
  - For collections select an artifact type collection from the drop-down list.
  - For documents, use Filter to locate the documentation artifacts to associate with the task and check
    the radio button to select them, or click Add Documents and follow the wizard to select documents
    from a selected collection.
  - For saved searches use **Filter** to locate the saved search containing the artifacts to associate with the task and check the radio button to select it.
  - Some tools do not require the selection of artifacts. For example, the report cleaner tool.

Click **Next** to set scheduling.

- 4 If you want this task to be executed at a set time or repeated on a periodic basis select **Scheduled**, complete the details as described in Setting a Schedule on page 285, and then click **Next** to set the task artifact name.
- 5 Optionally, edit the suggested name and description, and then click **Finish** to create the new task.

## Setting a Schedule

SOA Systinet enables you to execute tasks on a timed or periodic basis.

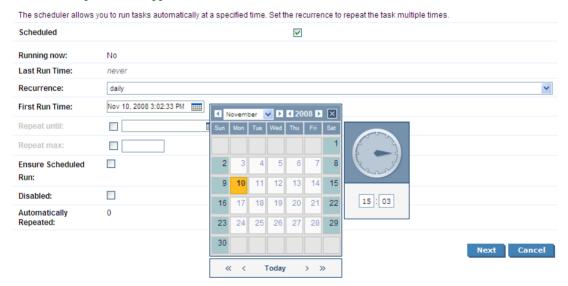


SOA Systinet converts and stores any input time to GMT. If you import scheduled tasks from a data image, review the scheduling to ensure that the tasks execute at the local time that you require.

#### To schedule a task:

- 1 Do one of the following:
  - In the detail view of the task click **Edit**, and then select **Scheduled**.
  - Select Scheduled during task creation.
  - On pages allowing asynchronous operations, click **Schedule Task**.

#### The schedule parameters appear:



2 Input the following parameters:

Parameter	Definition
Running now	A non-input field indicating whether the task is currently being executed
Last run time	The last execution time of the task
Recurrence	Select the frequency of execution if the task is to run periodically or <b>none</b> if the task is to be executed once
First run time	Use the calendar to set the date and time for the initial execution of the task
Repeat Until	If the task has a recurrence, optionally select <b>Repeat Until</b> , and use the calendar to select the date and time to stop executing the task.
Repeat max	If the task has a recurrence, optionally select <b>Repeat Max</b> , and input the number of times to execute the task. This figure is compared to the <b>Automatically Repeated</b> figure to determine whether to execute the task again.
Custom Interval (min.)	If the task has the <b>Interval</b> recurrence, input the interval.
Ensure scheduled run	Select to prioritize scheduled execution. If for any reason the task cannot execute at the scheduled time (for example, if the server is not running), then the task executes at the at the earliest opportunity. HP Software recommend selecting this option for tasks with long recurrence intervals.
Disabled	Select to prevent the automatic execution of the task
Automatically repeated	Displays the number of scheduled executions (not including manual executions).
	To reset this figure, remove the schedule and then create a new schedule.

## 3 Do one of the following:

- If you are editing a task, click **Save**.
- If you are creating a task, click **Next** and set the task name and description.

## **Reports**

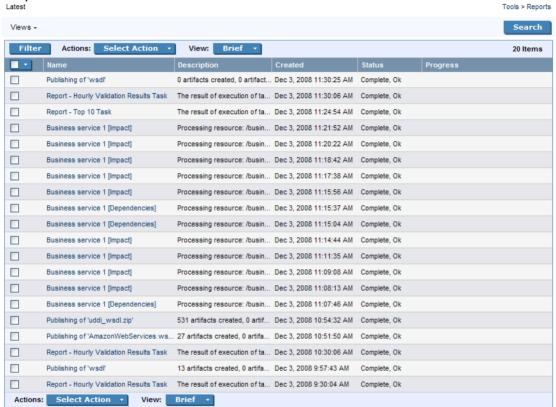
The result of a tool execution is a report. Reports are accessible from:

- The Reports link in the Catalog Browser.
- The Tasks and Reports portlet in the Dashboard and Tools tabs
- The **Tools** context menu in the **detail view** and **service view** of an artifact.

Clicking any of these links opens a report list view:

Figure 74. Reports List View

Reports



**Find** allows reports to be filtered according to various categories. Simply select the category and the browser only shows the reports which fulfill the given criteria.

The **Report Data** section contains output specific to each type of tool and is described in the report section of each tool in Tools on page 271.

## 20 Advanced Searches

You can use SOA Systinet to create customized queries that search the repository. These searches can be stored and then reused. Saved searches can also be used to define a set of artifacts associated with a task or used to create an RSS feed for the dashboard.

#### This chapter describes:

- Creating an Advanced Search on page 291
- Editing a Saved Search on page 294
- Running a Saved Search on page 296

## Creating an Advanced Search

Each advanced search is associated with one type of artifact.

#### To create an advanced search:

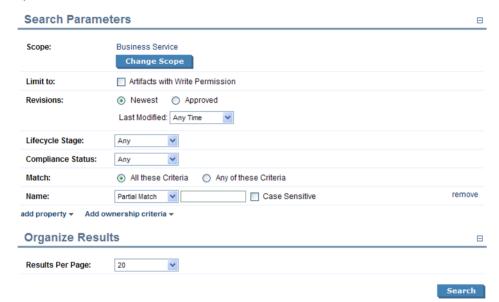
- 1 Do one of the following:
  - Click **Advanced Search** on any page.
  - In the Tools browse view of an artifact type click **Search**.

The Search page opens:

#### Search Business Services

Tools > Search Business Services

Use this screen to build a complex query using the property and ownership based criteria. You can select to find artifacts matching either all or any of specified search conditions.



2 To select the scope of your search, click **Change Scope**, and select the artifact types to search. Deselect all artifact types to search all artifacts.

Select Artifacts with Write Permission to restrict the search to artifacts you can modify.

3 Select the search parameters in the Search Criteria section:

Parameter	Definition
Revisions	Select one of the following:
	Newest Revisions
	Search for the latest revision of each artifact.
	Use <b>Last Modified</b> to locate only artifacts modified within the specified time limit.
	Approved Revisions
	Search the last approved revision of each artifact.
	Use <b>Last Approved</b> to locate only artifacts approved within the specified time limit.
Lifecycle Stage	Select a stage to narrow your search to governed artifacts at that lifecycle stage.
Compliance Status	Select a compliance threshold to limit your search to artifacts within the specified margin.
Match	Do one of the following:
	Select <b>All these Criteria</b> to find artifacts matching all the specified search criteria.
	• Select <b>Any of these Criteria</b> to find artifacts matching any one of the specified search criteria.
Search Terms	By default, the page shows search entry criteria for Name. You can add multiple search terms using <b>Add Property</b> and <b>Add Ownership Criteria</b> .

Parameter	Definition
Add Property	Select an artifact properties to use as a search parameter from the drop-down list.
	The options available depend on the artifact type.
Add Ownership Criteria	Select an ownership criteria to use as a search criteria from the drop-down list.
Results per page	Select the output criteria from the drop-down list.

- 4 Click **Search** to execute your query and view the results.
- 5 Optionally, click **Refine Search** to return to Step 2.
- 6 Optionally, save the search for later use, click **Save Search** to open the New Saved Search page.
- If you are storing the search for later use, amend the search name, description, and details, and then click **Save** to create the new saved search artifact.

Saved search artifacts are displayed in the Saved Searches section of the Services menu and you can also access them from the Tools tab Catalog Browser by expanding the Search and Transform branch, and clicking **Saved Searches**.

## Editing a Saved Search

Although the saved search is persisted it can be modified again. There are two kinds of modification:

- Changing the name and description properties of the saved search.
- Changing the parameters of the search.

## To modify a saved search:

1 Do one of the following:

 In the Tools tab Catalog Browser, expand the Search and Transform branch and click Saved Searches

The Saved Searches page opens.

Click the name of the saved search to edit.

In the Services tab menu Custom Views section, click the name of the search to edit.

The detail view of the saved search opens.

- 2 Do one of the following:
  - To edit the basic search properties:
    - In the detail view of the saved search, click **Edit**.
    - 2 Change the properties as required, and then click **Save**.
  - To modify the search parameters:
    - In the detail view of the saved search, click **Redefine**.
    - 2 Do any of the following:
      - Click **Remove** to remove criteria from the search.
      - Add new conditions or modify the criteria as described in Creating an Advanced Search on page 291.
    - 3 Click **Search** to execute the modified search.
    - 4 Click **Save Search** to save your changes.

## Running a Saved Search

- 1 Do one of the following:
  - In the Tools tab Catalog Browser, expand the Search and Transform branch and click Stored Searches.

The Saved Searches browse page opens.

Click the name of the saved search to run.

• In the Services tab menu Custom Views section, click the name of the search to edit.

The detail view of the saved search opens.

2 In the detail view of the saved search, click **Run**.

The search results page opens.