HP Systinet ARIS Integration

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User Guide

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About this Guide

Welcome to the HP Systinet ARIS Integration Guide. This guide explains how to use the ARIS Integration with HP Systinet.

This guide contains the following chapters:

- Chapter 1, HP Systinet ARIS Integration

- Chapter 2, Installing ARIS Integration

- Chapter 3, Searching and Importing HP Systinet Resources

- Chapter 4, Uploading HP Systinet Resources

- Appendix A, Configuring ARIS Integration

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.
OK	Button in a user interface.
New>Service	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

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1 HP Systinet ARIS Integration

HP Systinet enables your organization to manage the growth and development of your service infrastructure. HP Systinet ARIS Integration bridges the gap between your development environment and HP Systinet.

This chapter introduces ARIS Integration in the following sections:

- Overview on page 9

- Usecases on page 9

Overview

HP Systinet ARIS Integration is a set of features enabling you to integrate HP Systinet with your ARIS Platform.

ARIS Integration contains the following features:

- **Search and Import Services**

  Search the HP Systinet repository to find the service definitions you require and import them into ARIS Platform. For details, see Chapter 3, Searching and Importing HP Systinet Resources.

- **Upload Services and Processes**

  Upload services and processes from ARIS Platform to HP Systinet. For details, see Chapter 4, Uploading HP Systinet Resources.

Usecases

ARIS Integration is designed to assist ARIS Platform users (for example, ARIS Process Managers and IT Development Planners) with the following usecases:

- Importing HP Systinet artifacts into ARIS models and objects.

  - Search the repository for existing services.

  - Import selected HP Systinet artifacts into ARIS, creating corresponding objects and models.

  - Use the created ARIS objects for process modelling and ARIS data introspection.

  For details, see Chapter 3, Searching and Importing HP Systinet Resources.

- Upload services to HP Systinet.

  - You have SOAP service definitions in ARIS platform, created by ARIS import service functions.

  - Upload these services to HP Systinet, creating the corresponding artifacts in HP Systinet.

  For details, see Chapter 4, Uploading HP Systinet Resources.

- Upload processes to HP Systinet.

  - Create processes in ARIS (for example, EPC) and convert them to BPEL processes. These processes may be imports from HP Systinet or from other ARIS import processes.

  - Upload processes to HP Systinet, also uploading services used by the process. For details, see Chapter 4, Uploading HP Systinet Resources.

  - Use HP Systinet to track process dependencies and to govern them.

HP Systinet to ARIS Object Mapping

The relationship between HP Systinet artifacts and ARIS objects is best described with reference to ARIS model diagrams.
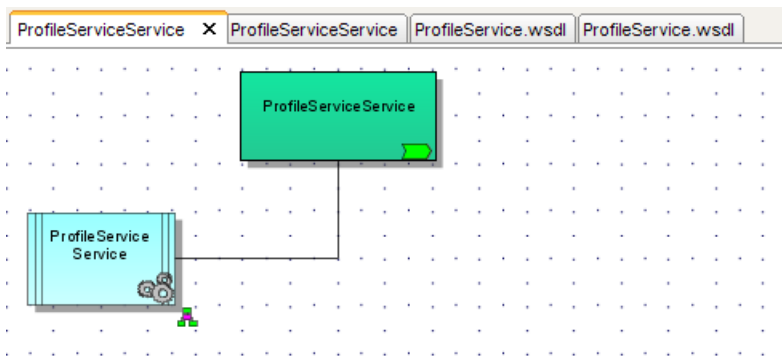
These diagrams represent the model created by importing the following set of HP Systinet artifacts:

- A business service artifact, Profile Service.

- A SOAP service implementation of the business service, also called Profile Service.

- A WSDL defining the service attached to the SOAP service, ProfileService.wsdl.

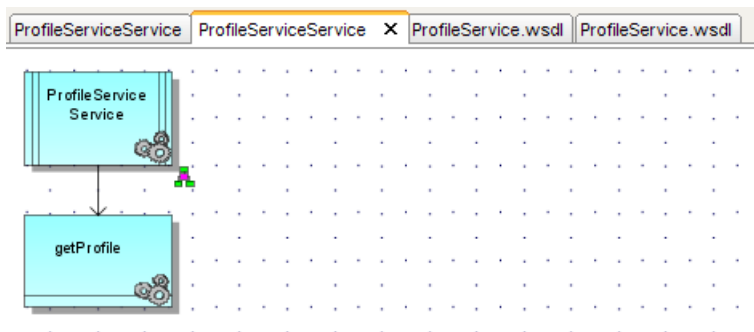- An operation defined in the WSDL, `getProfile`.

When you import this business service with all its related content, ARIS Integration creates ARIS objects which are represented in the following model diagrams. ARIS Integration opens these model diagrams in the Designer view during import:

- A Service Allocation diagram generated by importing the business service.
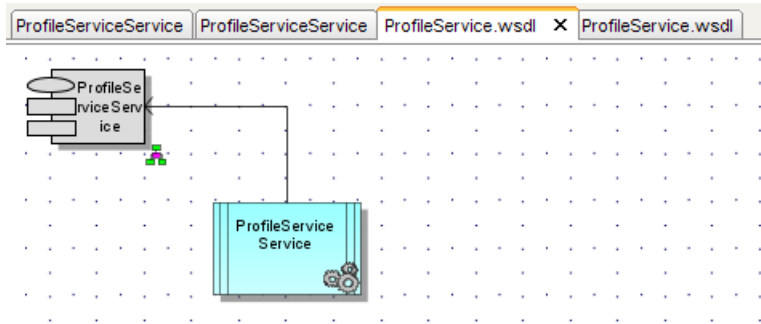

In this diagram the abstract Profile Service business service artifact is represented by the green *Service Type* object and the SOAP service implementation is represented by the blue *Application System Type* object.

- An Application System Type diagram generated by importing the SOAP service.

In this diagram the SOAP service implementation is represented by the blue *Application System Type* object at the top and the `getProfile` operation is represented by the blue *IT Function Type* object at the bottom.

- An Access diagram generated by importing the WSDL.
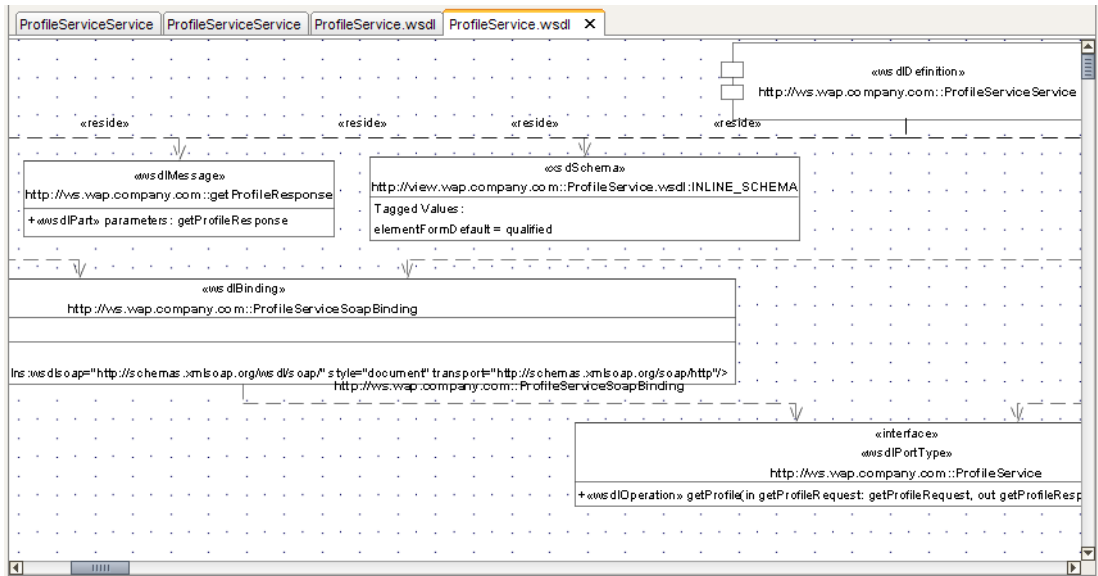

In this diagram the SOAP service implementation is represented by the blue *Application System Type* object linked to a grey *Component* object representing the UML model of the WSDL.

- A UML Component diagram generated by importing the WSDL.

This diagram describes the WSDL as a set of UML components.

During import, ARIS Integration copies some properties of the HP Systinet artifacts to their corresponding ARIS object representations.

For more details about importing, see Chapter 3, Searching and Importing HP Systinet Resources.

2 Installing ARIS Integration

HP Systinet ARIS Integration is a plug-in for ARIS Platform for use alongside HP Systinet 4.00 distributed as the following installation package:

`hp-soa-systinet-integration-4.00.jar.`

Table 1. System Requirements

Operating System	Java JDK	IDE
Windows XP	JDK 1.5	ARIS SOA Architect 7.1 build 411551
Windows 2003		

For supported platforms and known issues, see `readme.txt` alongside the installation package.

To install ARIS Integration:

1   Shut down ARIS Platform.

2   Execute the package, `hp-soa-systinet-integration-4.00.jar` to start the ARIS Integration installer.

3   Review the Welcome page and click **Next**.

4   Select **I accept the terms of the license agreement** and click **Next**.

5   Select the location of your ARIS Platform installation, referred to in this documentation as AP_HOME, and click **Next**.

   Use **Browse** to select an alternative to the provided default location.

6   Review your installation parameters and click **Next** to start the installation.

7   When the installation is complete, click **Next**.

8   Optionally, click the link to open the documentation folder, or click **Finish** to exit the installer.

To start ARIS Integration:

•   Start your installation of ARIS Platform.

After starting ARIS Platform, you can configure it to have an ARIS Integration toolbar.

To configure ARIS Platform:

1   In ARIS Platform, select any module except **Home**.

2   In the Navigation pane, click a server to start the standard ARIS database system.

3   From the menu, select **Evaluate>Configure macros...** to open the Assign macros wizard.

4   Select the Toolbar check-box for the ARIS Integration functionality that you want to add to the toolbar:

   • Search and Import HP Systinet Artifact to ARIS

   • Upload BPEL Process to HP Systinet

   • Upload Service Description to HP Systinet

The selected functionality is now available as a drop-down menu from the selected macro icon.

ARIS Integration encrypts and store passwords. Saved passwords are stored in a file that is difficult but not impossible for an intruder to read.

3 Searching and Importing HP Systinet Resources

HP Systinet ARIS Integration includes a Repository Search feature, enabling you to explore the content of HP Systinet and import the resources associated with selected artifacts.

ARIS Integration supports import for the following file types:

• WSDL

• XSD

To search the repository and import resources:

1 Do one of the following:

   • Select the data group and from the custom macro menu, select **Search and Import HP Systinet Artifact to ARIS**.

   > To set up this menu, see Chapter 2, Installing ARIS Integration.

   • Select the data group and from the menu, select **Evaluate>Start macro...**. Select **Search and Import HP Systinet Artifact to ARIS** and click **Next** and then **Finish**.

   • Open the context menu for the data group and select **Evaluate>Start macro...**. Select **Search and Import HP Systinet Artifact to ARIS** and click **Next** and then **Finish**.

   The Search Import wizard opens.

For ARIS Integration Search and Import functionality to operate correctly HP Software recommend logging in to your database using the `Entire method` filter.

2 Input your HP Systinet server URL and credentials, and then click **Next**. You can optionally save or validate your connection parameters.

3 In the Scope section, select an artifact type to search, and if required, a specific lifecycle stage and domain.

The Properties section refreshes showing specific details depending on the artifact type.

4 Enter your search parameters.

For parameter details, see the "SDM Documentation" in HP Systinet.

5 To display the parent artifacts search result artifacts depend on, select **Show Parent Artifacts**

Selecting **Show Parent Artifacts** may reduce the speed of the search.

6 Click **Next** to execute the search.

The results show a tree of artifacts for each artifact matching the search criteria. The tree for each matching artifact contains any child artifacts. If you select **Show Parent Artifacts** in your search, the tree also includes parent artifacts.

7 In the Repository Search Results view, select the artifacts to import, and click **Next**.

The Importing Artifacts dialog opens.

8 In the Importing Artifacts dialog:

Optionally, click **Select** to change the group in your data set to store the downloaded resources.

Optionally, input a text description to associate with the imported resources, and then click **Finish**.

ARIS Integration downloads the relevant service definition files associated with the artifacts and imports them to the selected group. The structure of the HP Systinet publishing location space is preserved. The imported resources are opened in the Designer view.

 When you re-import service definitions, existing ARIS models are not reused. Instead, ARIS Integration creates new models.

For details about the Publishing Location space, see "Publishing Locations Workspace" in the *HP Systinet Developer Guide*.

4 Uploading HP Systinet Resources

ARIS Integration enables you to upload service definition documents directly to HP Systinet.

ARIS Integration supports upload for the following file types:

- WSDL

- BPEL

- XSD

To upload a resources to HP Systinet:

1   In the Navigation panel, select the data group containing the service and process descriptions you want to upload.

2   In the group Object tab, select the service type objects you want to upload.

3   Open the context menu for the group, select **Evaluate>Start macro...**. Select **Upload Service Description to HP Systinet** or **Upload BPEL Process to HP Systinet**, and click **Next** and the **Finish**.

    The Upload Wizard dialog opens.

4   Input your HP Systinet server URL and credentials, and then click **Next**. You can optionally save or validate your connection parameters.

5   Select the domain to upload the resource to and click **Next**.

6   Select the publishing location folder, or input a new one, and then click **Next**.

7   Select from the following **Upload Options**:

Parameter	Definition
BPEL Decomposition	Select whether to create Business Process artifacts defined by a BPEL document.

Parameter	Definition
	This option is only valid for BPEL upload.

WSDL Decomposition	Select a WSDL processing level from the following options:
	
	• **Services**
	
	  Process any WSDLs, create all defined content and create business services to associate with any newly created implementations.
	
	• **Implementations**
	
	  Process any WSDLs and create all defined content. Business services are not created.
	
	• **None**
	
	  Publish any WSDLs as artifacts with attached data content. The WSDL files are not processed.

Service Type	Select a service categorization for created service artifacts.
Remove Unsynchronized	If a WSDL is republished the artifacts it references may change and previously created artifacts may no longer be required. Select artifact types to remove the relationships with these obsolete referenced artifacts.

Click **Next**.

HP Systinet processes the content for upload and returns an Upload Overview to ARIS Integration.

If your version of HP Systinet does not support the new advanced options, ARIS Integration offers a reduced set of the listed options.

8 Review the overview and click **Finish** to complete the upload and create the relevant artifacts, or **Cancel** to abort the upload.

A Configuring ARIS Integration

ARIS Integration uses a configuration file at the following location in the HP Systinet repository:

```
http://host:port/soa/platform/restSecure/location/hpsoa/client/aris-search-
configuration.xml
```

This file is a server specific configuration that all instances of ARIS Integration access to determine the format and content of repository search for that server. HP Systinet contains a default configuration that you can use with ARIS Integration.

If you use a custom SOA definition model then you can modify the configuration and upload it to the HP Systinet server.

ARIS Integration contains a default configuration defined in the following JAR file:

```
AP_HOME\JavaClient\lib\hp-soa-integration-lib\tools-search-core-4.0.0.jar
```

Within the JAR file the configuration file is in the following location:

```
\com\hp\systinet\tools\search\core\preference\aris-search-configuration.xml
```

To change the ARIS Integration configuration and upload it to HP Systinet:

1   Create a working copy of `aris-search-configuration.xml`.

2   Open `aris-search-configuration.xml` with a text editor.

3   Edit `aris-search-configuration.xml` to reflect your requirements.

    For details, see the following sections:

    • Configuring Search and Detail Parameters on page 24

    • Configuring Search Results on page 25

4   In HP Systinet use the **Upload Content** feature in the Tools tab to store the configuration in the repository.

In the Upload Content page, specify the following location:

```
/hpsoa/client
```

For details, see "Uploading Service Infrastructure from Definition Documents" in the *HP Systinet User Guide*.

Configuring Search and Detail Parameters

The artifact types in Repository Search and the property parameters displayed in Repository Search and the Artifact Detail View are defined in the `<details_view>` section of the configuration file.

For example, the application artifact is defined as follows:

```
<details_view>
  <artifact_type localName="hpsoaApplicationArtifact">
    <invisible_properties>
      <property localName="lastRevision"/>
      <property localName="revision"/>
      <property localName="identifierBag"/>
      <property localName="artifactType"/>
      <property localName="categoryBag"/>
      <property localName="stakeholderEmail"/>
      <property localName="criticality"/>
    </invisible_properties>
  </artifact_type>
  ...
</details_view>
```

To configure the Repository Search:

1   Open `aris-search-configuration.xml` with a text editor.

2   Do any of the following:

- Add an artifact type to search by adding an `<artifact_type>` segment using the localName of the artifact type.

- Remove properties from the search parameters and detail view by adding a `<property>` in the `<invisible_properties>` segment of an artifact, using the localName of the property.

> You can locate the localNames in your configuration at the following location:
>
> ```
> http://host:port/soa/systinet/platform/restBasic/repository/sdm/
> sdmConfig.xml
> ```

3   Save `aris-search-configuration.xml`.

Configuring Search Results

The property parameters displayed for artifacts in the Repository Search Results view are defined in the `<search_result>` section of the configuration file.

For example, the application artifact is defined as follows:

```
<search_result>
  <artifact_type localName="hpsoaApplicationArtifact">
    <visible_properties>
      <property localName="name"/>
      <property localName="version"/>
      <property localName="description"/>
    </visible_properties>
  </artifact_type>
  ...
</search_result>
```

To configure the Repository Search:

1   Open `aris-search-configuration.xml` with a text editor.

2   Do any of the following:

- Add an artifact type to search results by adding an `<artifact_type>` segment using the localName of the artifact type.

- Add properties to the results for an artifact type by adding a `<property>` in the `<visible_properties>` segment of an artifact, using the localName of the property.

> You can locate the localNames in your configuration at the following location:
>
> ```
> http://host:port/soa/systinet/platform/restBasic/repository/sdm/
> sdmConfig.xml
> ```

3   Save `aris-search-configuration.xml`.

Configuring Artifact Hierarchies

Service artifacts in HP Systinet form natural hierarchies. Repository Search locates the artifacts matching your search criteria, and if requested, any related artifacts specified in the hierarchical structure defined in the configuration.

For example, the default hierarchy is defined as follows:

```
<hierarchical>
  <artifact localName="hpsoaApplicationArtifact">
    <artifact localName="businessServiceArtifact" upRef="hpsoaProvidingApplication"
      downRef="hpsoaProvidesBusinessService">
      <artifact localName="webServiceArtifact" upRef="inBusinessService"
 downRef="service">
        <artifact localName="wsdlArtifact" upRef="definitionOf" downRef="definition"/>
      </artifact>
    </artifact>
  </artifact>
</hierarchical>
```

You can add and modify hierarchies to match those relevant to your requirements.

To configure the Repository Search hierarchies:

1   Open `aris-search-configuration.xml` with a text editor.

2   Do any of the following:

- Add a hierarchy by adding the top level `<artifact>` within the `<hierarchical>` segment, defined by its local name.

- Add artifacts to hierarchies by adding `<artifact>` within a nested structure of an artifact hierarchy. Define the artifact with a local name and directional relationship properties.

> You can locate the localNames and property names in your configuration at the following location:
>
> ```
> http://host:port/soa/systinet/platform/restBasic/repository/sdm/
> sdmConfig.xml
> ```

3 Save `aris-search-configuration.xml`.

> If you define multiple hierarchies, the first hierarchy defined takes precedence in the event of a conflict.

Configuring Localization

Localized text can be configured in repository search for artifact names in the `<artifact_mapping>` section of the configuration file.

For example, the application artifact is defined as follows in English, Spanish, and Vietnamese:

```
<artifact_mapping>
  <artifact_type localName="hpsoaApplicationArtifact">
    <custom_name value="Application"/>
    <custom_name locale="es" value="Aplicacion"/>
    <custom_name locale="vi" value="&#7912;ng D&#7909;ng"/>
  </artifact_type>
  ...
</artifact_mapping>
```

To configure the localized text in Repository Search:

1 Open `aris-search-configuration.xml` with a text editor.

2 Add a new mapping rule for localization to Repository Search by adding an `<artifact_type>` segment using the localName of the artifact type.

Specify the text to be localized with a `<custom_name>` specifying the text to be localized when the artifact type is rendered.

Add location specific text for an artifact type by adding a `<custom_name>` to the artifact specifying the locale and the text to use in that location.

> You can locate the localNames in your configuration at the following location:
>
> ```
> http://host:port/soa/systinet/platform/restBasic/repository/sdm/
> sdmConfig.xml
> ```

3   Save `aris-search-configuration.xml`.